

DIVISION OF CONSTRUCTION

OVERSIGHT ENGINEER

FIELD GUIDELINES



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Division of Construction
California Department of Transportation
State of California

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Acknowledgement

The Division of Construction acknowledges the District 4 Oversight Committee for their contributions. The committee developed the District 4 Oversight Project Field Instructions to promote uniform methods and procedures when administering construction oversight projects. The committee was gathered to review existing policy and procedures found in an array of Caltrans documents and develop a reference guide for use by construction oversight staff. The District 4 Oversight Project Field Instructions was used as the basis for this guide.

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Chapter 1 Oversight Project

Section 1 Introduction

These guidelines provide a convenient source of information on policy and procedure, and should be used as a resource for Caltrans employees who provide quality assurance (QA) on projects administered by others on the existing or future state highway system. These guidelines are not a contract document between either the project sponsor or the contractor, and Caltrans. Neither the project sponsor nor the contractor are required or obligated to follow these guidelines. The encroachment permit and the cooperative agreement outline the requirements and obligations for the project sponsor and the contractor. Caltrans personnel who provide QA should never attempt to use these guidelines as a substitute for the encroachment permit or the cooperative agreement.

These guidelines do not apply when the local or a private entity is funding all or part of the cost of the project and Caltrans is advertising, awarding and administering the contract. Use the *Construction Manual* for policy, procedure, and guidance when Caltrans advertising, awarding and administering a contract, regardless of the funding source.

Over the last 20 years, funding for projects on the state highway system has changed. Before 1984, most of the improvements to the state highway system were paid for with funds collected through federal and state gas taxes. In 1984, the citizens of Santa Clara County passed a ½ cent sales tax measure increase to pay for improvements to the state highway system. As a result, many other counties have passed one or more sales tax measure increases to pay for transportation improvements. Each measure set aside various percentages of the revenues to pay for state highway system improvements. In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA) changing the Federal Highway Administration (FHWA) funding for transportation. Following the passage of the ISTEA, state legislation allocated part of the ISTEA funds directly to the Regional Transportation Planning Agencies (RTPAs) for programming. These funds are called local federal-aid funds. Local federal-aid funds have been programmed for projects on the state highway system, and administered by Caltrans or the local agency. Passage of the 1998 Transportation Equity Act for the 21st Century (TEA-21) allowed funding for local federal-aid projects to continue. Caltrans acts as FHWA's pass-through agent to disburse federal-aid funds to local agencies. Neither the ISTEA nor the TEA-21 changed these duties. Programming of State Transportation Improvement Program (STIP) projects changed with the passage of Senate Bill 35 (SB-35). Some STIP projects are now constructed on the state highway system under local administration. The release of a new federal authorization bill was expected by October 1, 2003. Future project funding is subject to change. Many counties are still contemplating and placing ballot measures to increase or extend their ½ cent sales tax increase for transportation.

Chapter 1

Section 2 Definitions

Local agency – Any public entity (federal, state, RTPA, county, city, or other local government entity) that sponsors or administers a construction contract on the state highway system. In addition, any private entity that sponsors or administers construction contracts on the state highway system, unless otherwise noted can be considered a local agency.

Oversight project – Any project within the existing or future state highway right-of-way with a construction cost of \$300,000 or greater where the local agency administers the construction contract under the terms of an encroachment permit. Oversight projects are financed in whole or in part by a local agency. Oversight projects sponsored by local agencies with an estimated construction cost of \$1 million or more are constructed under the terms of a cooperative agreement and encroachment permit. Oversight projects sponsored by private entities, with an estimated construction cost of \$1 million or more, are constructed under the terms of a Highway Improvement Agreement and encroachment permit. Oversight projects with an estimated construction cost of less than \$1 million, in some cases may be constructed under the terms of an encroachment permit only. Certain projects such as those involving signal construction, landscaping, or sound walls, may require a cooperative or maintenance agreement.

Quality assurance (QA) – Planned and systematic actions necessary to provide confidence that a product or service quality will satisfy requirements for the contract.

Quality control (QC) – All contractor operational techniques and activities that are performed or conducted to fulfill contract requirements for quality.

Oversight engineer – A Caltrans employee who performs QA and oversight for construction oversight projects. The oversight engineer performs QA of the resident engineer's actions. For federal-aid projects, the oversight engineer performs QA for the entire project. Typically, an oversight project will have one Caltrans engineer assigned as the oversight engineer, while other Caltrans staff are assigned as assistant oversight engineer's. For landscape projects, the oversight engineer can be a landscape architect.

Office of Structure Construction – Oversight Engineer. A Caltrans Office of Structure Construction employee who is assigned to assist the oversight engineer as the structure representative. Office of Structure Construction structure representative can also be the oversight engineer.

Resident engineer – Use in the same context as described within the *Construction Manual*, except, the resident engineer works for the local agency, not Caltrans. Resident engineer performs QA of the contractor's QC operations.

Federal-aid project – Any project that has received any funding from the Federal Highway Administration (FHWA). Local agencies are usually reimbursed federal funds through Caltrans based on invoices received. Local agencies rarely receive funds directly from FHWA. Projects funded by other federal agencies are not subject to the federal-aid portions of these guidelines.

Cooperative agreement – Any formal, legally-binding contract between Caltrans and a city, county, or any public non-state entity for the construction phase of the project, whereby the participants agree to either share or cooperate in state highway improvement projects. Cooperative agreements outline the responsibilities and respective obligations of the participants. Cooperative agreements are required when exchanges of funds or commitments of personnel resources will occur.

Encroachment permit – A permit issued by Caltrans granting permissive authority to enter the state highway operational right-of-way and construct approved facilities. An encroachment permit is a valid contract when accepted by the permittee. Acceptance is acknowledged when any of the acts or work specified under the encroachment permit is performed. An encroachment permit is not a property right. It authorizes only the permittee or permittee's agent to perform the scope of work specified within the encroachment permit. The permittee may not transfer or assign an approved permit to another party. Double permitting is required for the contractor.

Chapter 2 Oversight Relationships

Section 1 Selection Process of the Local Agency's Contract Administration Team

Caltrans is responsible for reviewing the qualifications of proposed field staff and approving the local agency's construction contract administration team (in-house or consultant) for oversight projects that have a cooperative agreement. The cooperative agreement states the roles and responsibilities of both the local agency and Caltrans for the construction phase of the project. The cooperative agreement states that the resident engineer and support staff are subject to the approval of Caltrans. The oversight engineer is responsible for approving the resident engineer and support staff proposed by the local agency. The oversight engineer should not approve the local agency's in-house or consultant staff if they do not have appropriate qualifications. Full oversight federal-aid projects ("N" projects) will also require approval from the FHWA engineer per the stewardship agreement.

To attain the most favorable results, the oversight engineer should be involved early in the selection process, before the local agency assigns the essential members making up the construction management team for the project. If the local agency does not have in-house staff with appropriate qualifications, the local agency must hire a consultant that does. The team usually includes a resident engineer, the resident engineer's support staff, a structure representative, a survey group, and a materials laboratory. The resident engineer must be registered in the State of California as a Civil Engineer (other registered disciplines are allowable depending on the work) and perform the duties of field site representative. All team members must be qualified to perform their duties, and are thoroughly acquainted with the methods and procedures used by Caltrans. For projects covered by National Pollutant Discharge Elimination System (NPDES) permit, the construction management team must be qualified and knowledgeable in Water Pollution as specified in the permit. The resident engineer and all field staff members except survey and laboratory staff are required to have attended 24 hours of Caltrans approved WPC training. Upon consultant contract approval, the local agency should inform the oversight design engineer(s) of the final staffing plan.

All oversight projects that include structures, sub-structures, engineered excavations and shoring, or falsework construction require the submittal of Form TR-0133, "Certification of Structural Experience," for either the in-house or consultant staff. Oversight engineer and structures construction oversight engineer must review the form and make sure the experience matches with the type of work to be performed on the project.

If a local agency hires a consultant firm to perform the construction management, review the proposals made by the consulting firm, and request to participate in the interview process. Check the online debarment list to ensure that no debarred consultant is proposed to do work on the state highway right-of-way, at:

<http://www.dot.ca.gov/hq/construc/>, under "Debarred Contractors."

Comments, suggestions, and concerns about a consultant's qualifications should be forwarded to the local agency.

For federal-aid projects, while the resident engineer and support staff may be consultants, the local agency shall assign a full-time agency employee to be in responsible charge of the project at all times, although the employee need not be assigned solely to that project. "Responsible charge" means the local agency public employee is:

- Aware of the day-to-day operations on the project

- Aware of and involved in, decisions about changed conditions which require change orders or supplemental agreements
- Aware of the qualification, assignments and on-the-job performance of the consultant staff at all stages of the project
- Visiting the project on a frequency that is commensurate with the magnitude and complexity of the project
- Reviewing project records to make sure documentation is complete.

Once the construction management team members are selected, the resident engineer shall verify that the local agency's lab and all lab personnel and field engineers are certified by Caltrans to take samples and to perform lab tests in accordance with Caltrans testing methods. The resident engineer shall place a copy of Form TL-0111, "Certificate of Proficiency," in the project files for each lab person and field engineer. Non-certified personnel shall not be allowed to perform material acceptance sampling and testing. The oversight engineer should check the files periodically to make sure the certifications are in the files.

2-101 Local Agency's Staffing Level

Cooperative agreements typically do not specify staffing levels. Cooperative agreements only require that the local agency furnish qualified support staff (in-house or consultant) to assist the resident engineer and to ensure that the construction is performed in accordance with the plans and specifications. Discuss acceptable staffing levels with the local agency before the local agency assigns project personnel or hires consultants to perform contract administration and inspection duties. The staffing level is determined by the size and complexity of the project. At a minimum, the staffing for the project should consist of the resident engineer and one field engineer or inspector. Work closely with the local agency to ensure they provide sufficient staffing throughout the project to meet the workload. Failure by the local agency to provide sufficient staffing to undertake and satisfactorily complete the project is just cause to revoke the local agency's and the contractor's encroachment permit. In addition, if the project is not adequately staffed or suitably equipped, local agency's federal-aid funds can either be withheld or withdrawn. (See Chapter 5, "Deficient Contract Administration and Sanction.")

Chapter 2

Section 2 Caltrans Construction Quality Assurance Resources

The deputy district directors and region division chiefs of construction are responsible for assuring that adequate staff is assigned to each oversight project to perform required levels of Quality Assurance (QA). To accomplish this, personnel in district construction should work closely with district project management to ensure all oversight projects are identified, and the resources estimated for each project are adequate. Resources allocated for QA should be redirected to other projects only when the resource needs for oversight projects has decreased from what was estimated during the capital outlay support budget process. When first assigned an oversight project, the oversight engineer should obtain a copy of the project work plan that determined the resources allocated for QA activities for the project.

2-201 Cooperative Agreements

Oversight staff shall charge to the district the project is located in, and to the expenditure authorization (EA) established for the project, followed by the corresponding activity code. Local agencies can request Caltrans to perform reimbursed work on the project. Before performing any or allowing any reimbursed work, check the cooperative agreement for reimbursable staffing costs and authorization. In addition, determine if the EA is coded for reimbursed work. Oversight staffing allotment will be based on the terms of the cooperative agreement, construction cost and type of project.

2-202 Permits

Encroachment permit fees associated with oversight projects are defined within the cooperative agreement. The local agency's engineering and final construction permits, and the contractor's double permit are generally issued "fee-exempt," unless stipulated otherwise within the cooperative agreement. By State Statute, Streets and Highway Code 671.1, "Fees," public corporations are exempt from encroachment permit fees. The local agency's contractor may be billed for the inspection time on their double encroachment permit (DP) if stipulated within the cooperative agreement. Form TR-130, "Encroachment Permit Report (Daily Diary)," is required to be submitted to the district encroachment permits unit for processing, in closing out the encroachment permit file when the project is completed. All expended time shown on the Encroachment Permit Report (Daily Diary) shall coincide with the Form TR-0129, "Progress Billing/Completion Notice," and the inspector's time sheet to accurately determine the true cost recovery for the project, if any.

On oversight projects with construction costs greater than \$300,000 and less than \$1 million, inspection time is charged to that project EA. On projects where no EA is assigned, inspection time is charged against the Oversight EA of the oversight unit. Expended time reported against a project shall coincide with time reported in Staff Central – Online Reporting.

Chapter 2

Section 3 Relationships

Communication protocol for the construction phase of the oversight project is established before the start of work. Communications between the local agency representatives, Caltrans staff, (FHWA engineer on federal-aid projects) and the contractor is based on the terms of the cooperative agreement, encroachment permits, contract, and these guidelines. These terms and requirements result in communication channels different from typical state sponsored and administered projects. (See FL-8, “Communication Channels Flow Chart.”)

The following are the ground rules for communication for Caltrans staff:

- Communicate with the local agency’s person in “Responsible Charge,” the local agency’s resident engineer, and construction management team.
- Do not conduct business directly with the contractor. The contractor has a contract with the local agency, not with Caltrans. Therefore, Caltrans does not have the authority to direct or communicate with the contractor except for emergencies or urgent safety concerns when the resident engineer or staff are not present.
- The contractor communicates with the local agency’s resident engineer.
- If established, the resident engineer may communicate directly with METS and district traffic management. All other communication with Caltrans shall be done through the oversight engineer.
- If it is approved, consultant designers may communicate directly with the Caltrans oversight design staff in order to initiate timely design change review and concurrence.
- The resident engineer may contact the district traffic manager and radio room directly for lane closure reporting and for emergencies before contacting the oversight engineer.
- For high profile projects or other projects with considerable public interest, make sure the district public information officer is provided the project status on a regular basis and the resident engineer’s completed Form CEM-0101, “Resident Engineer’s Report of Assignment.”
- If partnering is established by the local agency, Caltrans staff should make themselves available for the partnering meetings.
- The oversight engineer may participate in the local agency’s claim process only if Caltrans district management concurs.
- The oversight engineer, resident engineer, construction storm water coordinator and contractor should jointly participate in inspection by environmental agencies and storm water compliance monitoring inspections.

2-301 Design Coordination

Typically, a design consultant under the administration of the local agency prepares the plans and specifications for oversight projects. For oversight projects with construction costs greater than \$1 million, the plans are reviewed and approved by a Caltrans oversight design engineer in the district’s design division, and FHWA engineer for full oversight projects. If the project includes bridge designs or other special designed structures, those portion of the plans are reviewed and approved by a Caltrans structure liaison engineer in the Division of Engineering Services, Office of Special Funded Projects. The oversight project engineer and structure liaison engineers are responsible for design oversight and

construction support. For oversight projects with construction costs less than \$1 million, oversight design responsibilities are coordinated through the district encroachment permits offices. In either case, changes to the plans during construction must be agreed to by the appropriate oversight design engineers (and FHWA engineer) responsible for oversight during the design phase.

Chapter 2

Section 4 Federal Highway Administration

The Federal Highway Administration (FHWA) has the authority and responsibility to implement and monitor federal laws, regulations and executive orders. When a project involves FHWA federal funding or requires FHWA approval action, or is on a federal-aid highway system, FHWA should become involved in accordance with the stewardship agreement(s) signed with Caltrans. When the project requires a permit from any federal regulatory agency, FHWA becomes involved in the process either as the lead federal agency or as a co-lead agency if FHWA funding or approval action is required.

2-401 Stewardship and Delegation of Authority

Stewardship is the process by which federal program responsibility and accountability are delegated to state transportation agencies to act as stewards over those federal functions. Passage of the ISTEA significantly changed the transportation business, and allowed the FHWA to exempt Caltrans from the FHWA review and oversight for many engineering activities on federal-aid projects. To address the major changes brought about by the ISTEA and the TEA-21, the FHWA and Caltrans executed a stewardship agreement. The stewardship agreement details the acceptance of the maximum degree of authority available to Caltrans. In addition, Caltrans agrees to act as stewards for project review, oversight, and administration of the FHWA federal-aid highway projects. The stewardship agreement between FHWA and Caltrans can be found by visiting the budgets web site:

<http://onramp.dot.ca.gov/hq/budgets/library/stewardshipagreement.pdf>

Passage of the ISTEA delegated additional authority to Caltrans for approval and administration of the FHWA's Federal-Aid Transportation Program. Caltrans has sought and accepted FHWA responsibilities to the maximum delegation of authority level allowable. By accepting the additional responsibilities on projects for which authority has been delegated, Caltrans ensures that projects not requiring the full oversight requirements of the FHWA are developed and administered to meet federal required procedures and standards.

2-402 Delegations Withheld

The FHWA retained authority and withheld delegation of the following Title 23 United States Code engineering activities:

- Certain interstate system projects
- Changes in new or revised access points to the interstate system
- Exceptions to the 16 foot vertical clearance requirement on the single route system
- Buy America requirement approval
- Exception to mandatory design standards on full oversight projects

Caltrans does not have approval authority for those non-engineering activities not covered by Title 23 of the United States Code (National Environmental Policy Act [NEPA], right-of-way, and civil rights among other activities).

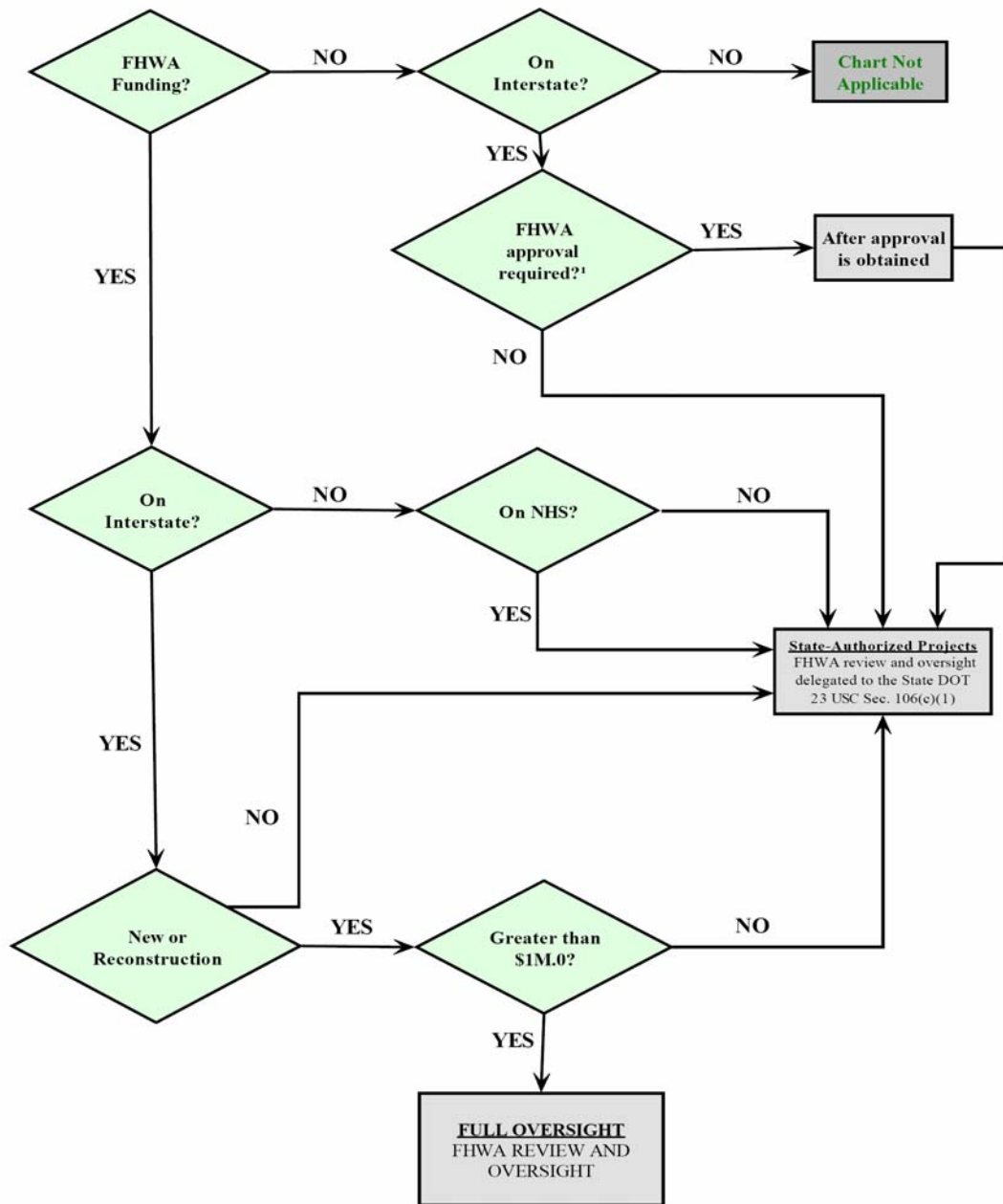
2-403 Project Oversight

The FHWA is responsible for those non-engineering activities not covered by Title 23 of the United States Code (National Environmental Policy Act [NEPA], right-of-way, and civil rights among other activities) for all federally funded projects. The FHWA's involvement should begin early in the project development process and continue until the project is completed. The degree of the FHWA review and oversight for a specific project should be established as soon as possible. The FHWA may review and oversight a specific project entirely, either in part, or not at all. Once the degree of the FHWA review and oversight is established, the project will be subject to federal involvement as detailed in the stewardship agreement.

The degree of the FHWA review and oversight for a specific project is determined by the following project definitions and flowchart:

- New
New transportation facility that did not previously exist in the corridor, or as the addition of an interchange
- Reconstruction
 1. The addition of a mainline through lane (except climbing and auxiliary lanes)
 2. A significant change in horizontal or vertical alignment
 3. Reconstruction of an interchange by adding moves or relocating ramps
 4. Replacement of an entire bridge or the major parts of an existing bridge (in such a manner that it is effectively) a new bridge on new vertical or horizontal alignment
 5. Seismic retrofit projects for the following:
 - Major or unusual structures as defined by Federal Aid Policy Guide (FAPG) G 6012.1 at web site:
<http://www.fhwa.dot.gov/bridge/unusual.htm>
Construction costs more than \$5 million per structure
 6. Major modifications to Traffic Management Centers
 7. Full depth pavement reconstruction

Flow Chart FL-1 for determining FHWA involvement and oversight on federal-aid projects



Federally funded projects are classified as either full oversight or state authorized to indicate the Federal Highway Administration (FHWA) review and oversight requirements as stated in the stewardship agreement between FHWA and Caltrans. Caltrans assigns project numbers to federally funded projects, and upon receiving a classification from the FHWA, adds a suffix “N” or “E” to the project number. Full oversight projects (suffix “N”) are subject to the full review and oversight requirements of the FHWA. State- authorized projects (suffix “E”) are exempt from the full review oversight requirements of the FHWA.

2-404 Events Invoking the Involvement of the FHWA on Full Oversight Projects

Several events (outlined in Section 5-007, “Federal Highway Administration Involvement in Contract Administration,” of the *Construction Manual*) that occur during the construction phase of a full oversight project, may make the involvement of the FHWA necessary. The oversight engineer and resident engineer (and the local agency’s person in “Responsible Charge” if the resident engineer is a consultant) should meet with their FHWA engineer immediately following award of the contract to determine when the involvement of the FHWA is necessary. The FHWA engineer is contacted sufficiently in advance of any project event deemed necessary to allow their participation. In all other cases, contact the FHWA engineer as soon as practical to ensure federal concurrence and participation. It is expected that as part of any advertising, awarding and administering by a local agency on an “N” project, Caltrans will need to work closely with FHWA in developing formal documentation (agreement) in which Caltrans recommends and submits to FHWA for review and approval that the local agency is capable of doing the advertising, awarding and administering. This is a FHWA requirement on a case-by-case basis for “N” projects.

2-405 Contract Change Orders Requiring FHWA Prior Approval

The resident engineer is to follow the producers outlined in Section 5-308, “Federal Highway Administration Contract Change Order Requirements,” in the *Construction Manual*. Review the contract change order records periodically to ensure compliance with the federal requirements. Also review and follow the procedures outlined in Section 3-107, “Contract Change Orders,” of these guidelines

In addition to the major contract change orders requiring federal approval (listed in Section 5-308, “Federal Highway Administration Contract Change Order Requirements,” of the *Construction Manual*) local agencies can also do change in scope change orders. FHWA approval is required on state-authorized projects for scope changes involving scope of the work, changes to project termini, and changes to the scope of the environmental approval, including mitigation commitments and permit requirements. The resident engineer should follow the procedures in Section 5-308 and 3-107 for changes in scope change orders, except Division of Construction, approval is not required.

Chapter 2

Section 5 General Requirements for Liability

The encroachment permit general provisions and the cooperative agreement hold the permittee responsible for all liability, personal injury and property damage. When required, the applicant shall show evidence of liability insurance before issuance of the encroachment permit. A company authorized to transact business in the State of California must provide the insurance.

When liability insurance is required, the applicant shall furnish an endorsement to the policy naming Caltrans, its officers and employees as “additional insured.” Professional liability exclusion is standard in insurance policies. This provides the state with adequate protection against foreseeable risks as additional insured.

2-501 Tort Liability

Upon completion of an oversight project, Caltrans accepts tort liability related to the completed facility. For this reason, local and private sponsors of state highway projects must conform to Caltrans standards and practices. Each district is required to provide sufficient resources to ensure quality assurance.

Local and private entities sponsoring state highway improvement projects need to cooperate with Caltrans in identifying deficiencies in physical facilities and operations to minimize the possibility of tort suits.

2-502 Non-Contractor’s Claims

Other types of claims, which may be encountered on oversight projects, are classified into the following two primary categories.

2-502A Public Claims by Persons Not Related to the State

Claims less than \$5,000 that are made against a permittee or Caltrans for permitted work are to be referred to the district claims unit. Claims of more than \$5,000 that are made against a permittee or Caltrans for permitted work are to be referred to the State Board of Control. Contact district claims unit for procedures to process a claim.

2-502B Caltrans Claims Against a Permittee

Any claims made by Caltrans district encroachment permit offices are related to incomplete or unacceptable work performed by a permittee, and are claimed or billed against the performance bond, when applicable. Caltrans legal staff manages the actual legal or court action taken against the permittee (local agency or contractor). The district construction coordinator should be informed when legal or court action is taken against a permittee.

Chapter 3 Quality Assurance

Section 1 Quality Assurance Administration Procedures

All oversight engineers and the Office of Structure Construction oversight engineer should have the latest versions of the following Caltrans manuals, or Internet access to the manuals, directives and guidelines in order to perform QA as the oversight engineer:

- *Construction Manual*
- *Encroachment Permits Manual*
- *Local Assistance Procedures Manual*
- *Highway Design Manual*
- *Independent Assurance Program Manual*
- *Storm Water Quality Handbooks*

For the Office of Structure Construction and the oversight engineer:

- *Bridge Construction Records and Procedures Manual*
- *Bridge Design Manuals*
- *All Bridge Construction Manuals and Guidelines*

The QA administration procedures during the construction phase of typical oversight projects are outlined below.

3-101 Funding

The cooperative agreement will contain information on project funding. Review the agreement to check for federal and state funding on the project. If federally funded, determine if the project is a full oversight or state-authorized project.

3-102 Advertisement, Award and Administration

Oversight projects are advertised, awarded and administered by local agencies. Caltrans policy states that the entity that advertises and awards the project shall also administer the construction contract. The Division of Construction chief is authorized to grant an exception to this policy.

3-103 Cooperative Agreement

During the design phase, construction oversight staff should participate in the review of the cooperative agreement. To increase the chances of incorporating comments, make comments early and provide a complete justification. This document is the contract between the local agency and the state, and outlines roles and responsibilities.

Cooperative agreements are normally divided into four parts:

- Recitals
- Section I, Local Agency Agrees
- Section II, State Agrees
- Section III, Mutually Agreed

Although the wording in the cooperative agreement may appear to be standard, construction staff should be familiar with each cooperative agreement. The cooperative agreement will contain specific details unique to each project.

3-103A Recitals

Recitals describe the project and set the stage for the agreement.

3-103B Section I, Local Agency Agrees

Typical details include the following:

- Requirements for encroachment permits for both the local agency and the contractor
- Contract administration procedures conform to the requirements set forth in the *Construction Manual*, *Local Assistance Procedures Manual*, and the *Encroachment Permit Manual*
- Requirements for material testing and quality control
- Description of resident engineer (field site representative) duties
- Breakdown and funding responsibility of roadway construction and construction engineering costs
- Requirements for construction engineering staffing
- Requirements for as-built plans and other submittals
- Requirements for survey monumentation preservation and replacement

3-103C Section II, State Agrees

Typical details include the following:

- The state's funding responsibility
- The process for transferring funds to the local agency
- Staffing commitments for the project

3-103D Section III, Mutually Agreed

Section III outlines mutual agreements. Typical details include the following:

- Plan approval requirements
- Procedures for procuring an encroachment permit
- Right of way certification by the local agency
- Award requirements
- Liability insurance requirements
- Contract change order process
- Contract claims process

3-104 Encroachment Permit

Become familiar with the encroachment permit process. Once the complete project package has been approved including a fully executed cooperative agreement, it is forwarded to the district encroachment permits unit, for review of completeness and issuance of the final construction encroachment permit to the local agency. The local agency's contractor is required to obtain a separate encroachment permit, a double permit before the start of any construction work within the state highway right-of-way. Do not allow the

contractor onto the state highway right-of-way without possession of an encroachment permit, regardless of the circumstances.

3-105 Resident Engineer's Report of Assignment

The resident engineer shall complete Form CEM-0101, "Resident Engineer's Report of Assignment," and forward the report to the oversight engineer and to the FHWA engineer for full oversight projects. For all projects, the oversight engineer is named on the report as a contact person in addition to the resident engineer under the "CALIFORNIA DEPARTMENT OF TRANSPORTATION" contact list. The oversight engineer will review the form and distribute it as required by Section 5-101B, "Construction Forms," of the *Construction Manual* and district procedures.

3-106 Contract Records and Oversight Engineer Files

The resident engineer is responsible for contract documentation and maintaining all contract records. The oversight engineer is responsible for documenting records of conversations between Caltrans and the local agency representatives, approvals, inspections, reviews and other such activities on the Form TR-0130, "Encroachment Permit Report (Diary)."

Cooperative agreements require the local agency's contract administration procedures to conform to the requirements in the *Construction Manual*. Therefore, construction documentation for projects with cooperative agreements are categorized and filed in accordance with Section 5-102, "Organization of Project Documents," of the *Construction Manual*. Contract files maintained by the resident engineer must be accessible to the oversight engineer and are reviewed periodically throughout the life of the project to verify conformance with Caltrans procedures.

The oversight engineer establishes and maintains a project file for each oversight project. As a minimum, the file should include the following:

- Cooperative agreement and encroachment permit
- CL-1, "OSE Preconstruction Checklist"
- CL-2, "Local Agency and OSE's Preconstruction Conference Checklist"
- CL-3, "Resident Engineer Contract Provisions Checklist"*
- CL-4, "OSE's Construction Contract Administration Checklist"
- CL-5, "Federal-aid Projects" *
- CL-6, "FHWA Final Acceptance Checklist" including forms and backup information *
- Contract special provisions and plans, completed bid sheet, and a breakdown of lump sum items (include any addenda, and local agency's standard plans and specifications)
- Form CEM-0101, "Resident Engineer's Report of Assignment"
- Correspondence between the local agency, Caltrans, and FHWA *
- Form TR-0130, "Encroachment Permit Report(s)"
- Form TR-0129, "Encroachment Permit Progress Billing/Completion Notice"
- Form TR-0122, "Encroachment Permit Rider(s)," if applicable
- Form TR-0133, "Certification of Structural Experience," if applicable
- For full oversight projects, FHWA Form 1446C, "Final Inspection of Federal-aid Project," (Exhibit 17-B, *Local Assistance Program Manual* signed by the FHWA engineer)

- For state-authorized projects, “Local Agency Final Inspection Form,” (Exhibit 17-C, *Local Assistance Program Manual*) signed by the oversight engineer *
- List of all the contract change orders with Caltrans contract change order codes and a copy of all contract change orders requiring Caltrans concurrence and FHWA approval *
- Copy of requests for information log, if applicable
- Copy of approved submittals, falsework and shoring plans
- Form CEM-3101, “Notice of Materials to be Used,” when source inspection is requested or required
- Job photographs
- Form TR-0020, “Notice of Change in Vertical and Horizontal Clearance,” if applicable
- Copy of contract progress pay schedules, when required by the cooperative agreement
- Project documentation required by the Division of Engineering Services
- Environmental Protection Agency, identification numbers and tracking documentation for disposal of hazardous waste.

* Only required on federal-aid projects

3-106A Checklists

Several checklists have been developed for performing QA.

1. The CL-1, “OSE Preconstruction Checklist,” is a convenient list of items to have when first assigned responsibilities for an oversight project.
2. CL-2, “Local Agency and OSE’s Preconstruction Conference Checklist,” provides a list of items to discuss with the resident engineer at the first meeting.
3. CL-3, “Resident Engineer Contract Provisions Checklist,” is to verify and document that the local agency’s contract meets federal requirements.
4. The CL-4, “OSE’s Construction Contract Administration Checklist,” and Form TR-0130, “Encroachment Permit Report (Diary),” document each visit to the project site or office by the oversight engineer, the Office of Structure Construction oversight engineer, and their staff. This documentation should include the scope of activities, approvals, safety review comments, records of conversation, and other items noted on the checklist to verify construction contract administration. The checklist does not need to be filled out completely with each visit, just the items that were reviewed. The diary shall not include detailed labor, equipment and material information; the resident engineer’s staff shall perform that task. The amount of time spent at the project site or office, and travel time, shall be recorded on the report to the nearest half-hour. A single form can be used for multiple inspections, with inspection time totaled and noted in the space provided on the form.

3-106B Encroachment Permit Projects

On encroachment permit projects, the Form TR-0130, “Encroachment Permit Report (Diary),” is submitted to the district encroachment permit unit for processing, in closing out the encroachment permit file. When the encroachment permit indicates that the permittee will reimburse the state for inspection, all time shown on the Form TR-0130, “Encroachment Permit Report (Diary)” must agree with the Form TR-0129, “Progress Billing/Completion Notice.” Staff Central-Online Time Reporting System must show the time charged to the inspection expenditure authorization (EA). This form should not be signed until the as-built plans, when required, are submitted by the permittee and approved by the oversight engineer.

The encroachment permit general provisions and cooperative agreement require the permittee to submit as-built plans and other completion records to Caltrans. As-built plans and other completion records should conform to the requirements stated within the encroachment permit and cooperative agreement. The oversight engineer and the Office of Structure Construction oversight engineer ensure that the resident engineer adds modifications to the as-built plans as the project progresses. The oversight engineer and the Office of Structure Construction oversight engineer must verify the accuracy of the as-built plans and other completion records.

The permittee is required to submit Form TR-0128, "Notice of Completion," to the oversight engineer upon completion of the project.

3-106C Requests for Information

Usually, the resident engineer establishes a request for information file and a tracking log on large projects. The oversight engineer should be aware of the request for information and the corresponding responses. (See FL-2, "Approving Request for Information Process" in the flow charts section of this manual.)

The required Office of Structure Construction distribution schedule for request for information can be found in Section 2-19.0, "Administration of Special Funded Projects," of the *Bridge Construction Records and Procedures Manual*.

3-107 Contract Change Orders

The resident engineer shall prepare all contract change orders. Design changes shall be reviewed and concurred by the designer of record. Caltrans is not responsible for resolving design conflicts or even drafting contract change orders. Review and give written concurrence (or denial), of all contract change orders related to public safety, public convenience, and the design or specification changes for work within the state's ultimate right-of-way. Concurrence is given in advance of performing the work. Design changes shall be reviewed with the design oversight project engineer and structure design changes shall have the concurrence of the structure liaison engineer. Generally, the structure liaison engineer should provide concurrence in writing, but for structure changes, the Office of Structure Construction oversight engineer may use Form DS-OS C93, "Office of Structure Construction Concurrence for Changes Involving Structure Work," to document verbal concurrence. A copy of the contract change orders requiring the Office of Structure Construction oversight engineer's concurrence shall be included in the oversight engineer's project file.

The district's contract change order approval process shall apply to oversight projects, except contract change orders on an oversight project do not need Division of Construction prior approval. In order to mitigate any possible delay in the concurrence of contract change orders, a review process that specifies procedures and timelines between Caltrans and the local agency shall be agreed upon. (See FL-3, "Change Order Approval Process," and FL-4, "Local Agency Initiated Design Change Process.")

On full oversight federal-aid projects, prior approval of contract change orders from the FHWA engineer is normally done through the oversight engineer. The resident engineer does not get prior approval directly from the FHWA engineer unless the FHWA engineer approves communication directly with the FHWA in advance at the preconstruction meeting. Refer to Section 7-2, "Federal Highway Administration," of this manual for the FHWA contract change order approval requirements.

Failure of a local agency to get approval by the FHWA for a contract change order on full oversight federal-aid projects in advance of doing the work can make the contract change order ineligible for federal reimbursement and may jeopardize the entire project funding.

3-108 Progress Pay Estimates

The local agency is responsible for processing progress pay estimates. The oversight engineer should be spot-checking progress pay estimates quarterly to monitor the progress of the project.

3-108A State Funds

Verify that any designated funds from the state are used for the designated work. Meet with the Caltrans oversight design engineer and the local agency to ensure that everyone agrees on what work the state will pay for, and how that amount will be determined. It may be a simple lump sum, a percentage of the project, or specific items for a specific portion of the project. The local agency should send the oversight engineer detailed invoices. Confirm the details of the invoices. Compare the invoices with the quantities or amounts originally estimated. Spot-check quantity calculations made by the local agencies.

3-108B Federal-aid Projects

Spot-check to verify that quantity calculations include source documents as outlined in Section 3-903C, “Source Documents,” of the *Construction Manual*. Spot checks are conducted quarterly. The local agency does not need to use Caltrans issued forms for source documents. The local agency can use their own forms as long as they are independently checked, there are separate files for each contract item, and the calculations provide an audit trail.

3-108C Progress Payments

The oversight engineer needs to discuss prompt payment requirements with the resident engineer during the preconstruction meeting.

When the contractor receives each progress payment from the local agency, federal and state regulations require the prime contractor to pay subcontractors for satisfactory performance no later than a specific number of days (10 for state and 30 for federal).

Federal regulations also require the prime contractor to promptly release retainage on payments to the subcontractors no later than 30 days after the subcontractor’s work is satisfactorily completed. Performance is considered satisfactory when the local agency pays for all or part of the item of work on the progress payment, that is; if the local agency pays the prime contractor then the prime contractor should pay the subcontractors within the specified time.

If a subcontractor notifies the resident engineer that they are not being paid promptly by the prime contractor, the resident engineer must be proactive in settling any disputes, and not wait until the end of the contract. Once notified, the resident engineer must make sure the subcontractors are paid promptly, or have documentation from the prime contractor explaining why the subcontractors have not been paid. Prime contractors can not arbitrarily set satisfactory performance measures. The prime contractors have to show just cause for not paying the subcontractors such as: not submitting payrolls, failure to pay suppliers, and other causes.

3-108D Deficiencies and Issues

If the resident engineer is not preparing quality calculations for an audit trail, or is not being proactive in settling disputes with subcontractors, see Chapter 5, “Deficient contract Administration and Sanctions.”

3-109 Plans, Shop Plans, and Submittal Review

Establish a process for plans, shop plans, and submittal reviews with the input of the Office of Structure Construction oversight engineer. Submittals and plans for permanent and temporary work, which will require the concurrence of Caltrans, are established before the start of construction. Since multiple parties are involved in the review process, review periods are critical to the submittal approval process. A process is established that meets the time limits specified in the approved contract documents. See Section 2-19.0,

“Administration of Special Funded Projects,” in the *Bridge Construction Records and Procedures Manual* for additional information on the structure submittals.

3-110 Falsework and Shoring Reviews

The resident engineer must send the Office of Structure Construction oversight engineer an approved copy of all falsework and shoring submittals and copies of the local agency’s independent engineering review and calculations for work to be constructed adjacent to public traffic and within the existing and future state highway right-of-way. To avoid delays, the resident engineer should submit the required information to the Office of Structure Construction oversight engineer before sending the final approval to the contractor. The Office of Structure Construction oversight engineer performs a review of the submittal and the local agency’s independent engineering review to verify that Caltrans established best practices policies and procedures are followed before erection or construction. This review does not include an independent check of the calculations or plans. Independent checks are considered reimbursed work and require district director prior approval before performing the work. (See Section 2-2, “Caltrans Quality Assurance Resources,” of this manual.) The Office of Structure Construction oversight engineer also verifies that the local agency’s resident engineer or approved representatives have performed an independent engineering review of the plans prior to approving the contractor’s submittals. Whoever approves the plans can not have any affiliations with the person or firm that prepared the plans. An independent engineering review is required. The local agency’s approval shall be noted on the approved plans similar to the approval used by the structure representative on a Caltrans administered project. A copy of the approved submittal is forwarded by the Office of Structure Construction oversight engineer to the Division of Construction’s oversight engineer.

3-111 Right-of-Way Maintenance Responsibility

During construction, the local agency is responsible for maintaining the state highway right-of-way that will be affected by the project as outlined in the encroachment permit. Communications are established between the Caltrans local maintenance supervisor, the resident engineer, the local agency’s person in responsible charge, and the oversight engineer to outline responsibilities consistent with Section 5-006, “Maintenance Reviews,” of the *Construction Manual*.

3-112 Notification of Altered Horizontal and Vertical Clearance

The resident engineer must notify the oversight engineer of all proposed changes to vertical or horizontal clearance in accordance with Section 3-705, “Public Safety,” of the *Construction Manual*. Submit Form TR-0020, “Notice of Change in Vertical or Horizontal Clearance,” at least 15 calendar days before implementing the proposed vertical or horizontal clearance changes. Submit the form to either the north region or south region construction and maintenance liaison in the Transportation Permits Branch. The north region liaison is responsible for districts 1, 2, 3, 4, 5 (except San Luis Obispo and Santa Barbara Counties), 6 (except Kern County), and 10. The south region liaison is responsible for districts 5 (San Luis Obispo and Santa Barbara Counties only), 6 (Kern County only), 7, 8, 9, 11, and 12. Failure to report proposed changes timely and accurately may compromise public safety or cause delays to the traveling public.

3-113 Labor Compliance and Equal Employment Opportunity

Federal and state laws require contractors working on public works contracts to pay prevailing wages to their employees. The resident engineer is responsible for ensuring that the contractor is in compliance with the laws. These responsibilities are outlined in Section 8-1, “Labor Compliance,” of the *Construction Manual*.

The resident engineer is also responsible for administration of the nondiscrimination and equal employment opportunity provisions of the contract. These responsibilities are outlined in Section 8-207, “Employee Complaints – Discrimination Complaint Processing,” of the *Construction Manual*.

3-113A Federal-aid Projects

The local agency is responsible for designating a labor compliance officer to enforce the contract provisions and to ensure that all labor compliance requirements are performed and documented in the project files. The labor compliance officer may be a consultant; however, the labor compliance officer can not be the resident engineer. The resident engineer is responsible for notifying the oversight engineer, in writing, who the local agency designates as the labor compliance officer. The officer is subject to the same review and determination of acceptance as the rest of the local agency’s contract administration team, as outlined in Section 2-1, “Selection Process of Contract Administration Team.” The resident engineer and labor compliance officer are required to follow the procedures outlined in Section 8-1, “Labor Compliance,” of the *Construction Manual*.

Verify that the resident engineer is conducting employee interviews as outlined in Section 8-205, “On-Site Interviews” of the *Construction Manual*. Spot-checking of completed Form CEM-2504, “Employee Interview: Labor Compliance/EEO,” is recommended to make sure that the local agency’s labor compliance officer is investigating any irregularities noted during the interviews.

The local agency’s labor compliance officer is responsible for spot-checking the certified payrolls as outlined in Construction Policy Bulletin (CPB) 03-7. Spot-check to verify that payrolls are checked for compliance.

One month after the start of construction, check to see that federal posters have been posted for every worker to see. The posters should be posted at, or near, the contractor’s office, at the construction site, or at the central gathering point of the contractor’s workers. List of required posters can be found by visiting FHWA’s web site at:

<http://www.fhwa.dot.gov/programadmin/contracts/poster.htm>

3-113B All Other Projects

The local agency is responsible for ensuring that their contractor is complying with state labor compliance laws and regulations, and for reporting labor compliance violations to the California Department of Industrial Relations, Division of Labor Standards Enforcement. The oversight engineer is not required to perform QA of the local agency’s state labor compliance enforcement.

3-114 Disadvantage Business Enterprise

Federal regulations require that any local agency that awards contracts with federal transportation funds is required to establish a Disadvantage Business Enterprise (DBE) program, which has been approved by the district local assistance engineer. As part of the DBE program, the local agency is required to designate a DBE liaison officer to administer the local agency’s DBE program. The DBE liaison officer can not be the resident engineer or a member of the resident engineer’s staff. Each federal-aid construction contract is required to include the DBE specification; however, not all the contracts are required to have a DBE contract goal. The DBE liaison officer is responsible for setting the contract goal. The DBE liaison officer and the resident engineer ensure the contractor meets the contract DBE goal with certified DBEs. To determine responsiveness to DBE provisions for subcontractor substitutions, the DBE liaison officer and the resident engineer review and evaluate the good faith efforts of the contractor.

The resident engineer is required to follow the local agency’s DBE program. The local agency’s DBE program is similar to Section 8-303, “Monitoring and Enforcement During Construction,” and Section 8-304, “Adding, Removing or Substituting DBE or DVBE Subcontractor,” of the *Construction Manual*.

The local agency officers and personnel replace Caltrans divisions, officers, and personnel noted. The oversight engineer spot checks to verify the local agency is meeting the DBE requirements quarterly.

State law only requires Disabled Veterans Business Enterprises (DVBES) on state administered contracts, not on local agency administered contracts.

If the local agency is not following the DBE requirements, federal funds shall be withheld from the local agency until the local agency can verify that they are following the federal DBE requirements. An example of noncompliance would be the project files do not have documentation showing the DBEs listed on the contractor's DBE Information Form providing a commercial useful function on the project. Without documentation, the contract items, or parts of the contract items, designated for the DBE are ineligible for federal participation. Complete lack of documentation in the project files to show that any of the DBEs listed performed a commercial useful function, can cause the project to become ineligible for federal participation. (See Chapter 5, "Deficient Contract Administration and Sanctions," of this manual.)

3-115 Environmental Hazards and Safety Procedures

Hazardous materials, waste, and spills are handled in accordance with the *Construction Manual* procedures outlined in Section 7-106, "Environmental Hazardous and Safety Procedures," and Section 7-107, "Hazardous Spills." Funding for cleaning up hazardous waste is dependent on the specific language in the cooperative agreement. For most cooperative agreements, responsibilities and costs for any action regarding unforeseen hazardous waste sites will be covered by an amendment to the original cooperative agreement. The resident engineer can not use Caltrans hazardous waste emergency contracts unless provided for in the cooperative agreement.

3-116 Contractor Claims

The resident engineer and contractor must follow the procedures for notices of potential claims according to the *Standard Specifications* and the contract's special provisions. The resident engineer shall notify and provide the oversight engineer with a list of all notices of potential claims whenever the list is updated. Monitoring of potential claims is especially important when state funds are involved. When the project is a full oversight federal-aid project, copies of the list shall be sent by the resident engineer to the FHWA engineer and the oversight engineer at the same time.

The local agency must provide a claim process acceptable to Caltrans, and shall process claims through that claim process. The claims process outlined in the *Standard Specifications*, Section 9-1.07, "Payment After Acceptance," may be used as a guide for a local process, but local officials, rather than Caltrans personnel, shall be used. If requested by the local agency, the oversight engineer may provide advice and technical input in any claim process. Participation in the settlement of claims that involve state funds will be based upon the percentage of state funding on the project, and will require concurrence by Caltrans. The FHWA engineer prior approval is required for federal participation in the claim settlement for full oversight projects.

3-117 Debarred Contractors

Caltrans has developed and implemented rules and regulations for the debarment of parties who have concealed, misrepresented, or altered documentation or tests relating to a construction project within state highway right-of-way.

When a local agency or private entity submits an encroachment permit proposal to Caltrans for review and consideration, parties involved with the development, engineering and construction of the proposal are validated against the list of debarred parties at the following web site:

<http://www.dot.ca.gov/hq/construc/>

On oversight projects, when the oversight engineer suspects fraudulent tests or inspection reports, the oversight engineer should discuss the situation with their senior construction engineer and their district materials engineer. District construction should then follow the procedures in Construction Policy Bulletin (CPB) 05-1, “Suspected Fraudulent Test and Inspection Reports.”

Cooperative agreements and encroachment permits include clauses where the local agency has agreed to adhere to Caltrans rules and regulations. Oversight engineer should discuss with the resident engineer debarment requirements, at their preconstruction meeting, to ensure that no debarred contractor works on the project. Make sure the resident engineer discusses the debarment requirements with the contractor at the preconstruction conference.

Chapter 3

Section 2 Quality Assurance Reviews

The primary role of the oversight engineer is to perform QA by verifying that the resident engineer is performing their duties and responsibilities. The resident engineer's QA is to ensure that the project is constructed in accordance with the *Standard Specifications*, Standard Plans, project special provisions and plans, and conforms with the methods and practices specified in the *Construction Manual*. The oversight engineer performs this role by exercising the authority given in the cooperative agreement and encroachment permit. The cooperative agreement authorizes Caltrans to accept or reject the work, order any actions necessary to ensure public safety and the preservation of property, and ensure compliance with all provisions of the encroachment permit.

To simplify the QA process, checklists have been developed. The checklists are a guideline for the oversight engineer for the items that should be checked when reviewing a project. The checklists are not an all-inclusive list of everything that needs to be checked when providing QA. The checklists also provide references to the *Local Assistance Procedures Manual*, *Encroachment Permits Manual*, *Construction Manual*, and the recommended frequency for checking each item. Providing QA also requires verifying that the resident engineer is ensuring that the project is constructed in accordance with Caltrans approved Plans, Specifications, & Estimate (PS&E). The Caltrans *Highway Design Manual* is a good reference.

For federal-aid projects, the primary role of the oversight engineer is to represent the FHWA and to verify the resident engineer is ensuring compliance with federal requirements outlined in the contract and the *Construction Manual*. Caltrans has accepted this responsibility as part of the stewardship agreement with the FHWA.

All oversight engineers, assistants, and Office of Structure Construction oversight engineers should be equipped with the Caltrans *Encroachment Permits Inspection Booklet*. This guide can be obtained from the Division of Traffic Operations, Encroachment Permits Branch or the district encroachment permits office. The booklet was developed and first published in October 1998 by the Division of Traffic Operations, Encroachment Permits Branch as a guide for developing standard practices in encroachment permit inspection.

Shown below are the essential steps that should be taken before the beginning of construction:

- Review the cooperative agreement, encroachment permit, project plans, and special provisions. Use CL-1, "OSE Preconstruction Checklist."
- Establish communication channels between Caltrans oversight design staff and the local agency. For additional information, see Chapter 2, "Oversight Relationships," in this manual.
- Participate in the local agency's staffing selection process for construction administration personnel (in-house or consultant), including rejecting those construction administration personnel not qualified to perform the function for which they will be assigned or hired.
- Ensure that the local agency has initiated contract administration procedures in accordance with the *Construction Manual*. Use CL-2, "Local Agency and OSE's Preconstruction Conference Checklist."

Once construction has started, the oversight engineer determines the frequency of field reviews and project record reviews. The typical inspection procedures for QA of project materials and construction activities are outlined in CL-4, "OSE's Construction Contract Administration Checklist," and described below.

3-201 Materials

Contracts administered by local agencies shall provide for acceptance sampling and testing as required in Chapter 6, “Sampling and Testing,” of the *Construction Manual*. This includes full administration of sampling, testing, inspection programs, and acceptance of those materials and processes involved in the work described in Chapter 6 and elsewhere in the *Construction Manual*. Independent assurance testing, specialty testing, and source inspection, remain the responsibility of Caltrans. For federal-aid projects, each local agency shall develop a Quality Assurance Program which will ensure the materials and workmanship incorporated into the project are in conformity with the requirements of the contract.

Before execution of the cooperative agreement for the construction phase of the oversight project, district construction should have reached an understanding with Materials Engineering and Testing Services (METS) and the district materials engineer defining specialty testing, establishing a schedule for fabrication and construction activities, and outlining responsibility for source inspection. Chapter 16, Section 16.14, “Quality Assurance Program – Source Inspection,” of the *Local Assistance Procedures Manual* establishes a process by which an understanding can be reached. Ensure that the understanding is in place when first assigned the oversight project. If not in place, contact METS and the district materials engineer to establish an understanding.

3-201A Source Inspection

As part of the preconstruction conference, establish protocol with the resident engineer and contractor for communicating with METS. The contractor is responsible for completion of Form CEM-3101, “Notice of Materials to be used.” (See , FL-5, “Material Control Flow Chart.”) The resident engineer sends either the original or a copy of this completed form to the oversight engineer. Depending on who is responsible for communication with METS, either the oversight engineer or the resident engineer shall ensure distribution as stated on the bottom of the form, and to keep METS apprised of changes to the construction schedule. METS reviews the form and assigns inspection responsibilities to varying units. Materials may be accepted by certificates of compliance or by source testing. If materials are accepted by a certificate of compliance, METS forwards Form TL-0028, “Notice of Material to be Inspected,” to the resident engineer. If material cannot be accepted by a certificate of compliance, METS inspects and tags the material using Form TL-624, “Inspection Tag,” and sends Form TL-0029, “Report of Inspection of Material,” to the resident engineer. Verify that the resident engineer is following these procedures during project record reviews.

During the construction review phase for the cooperative agreement, district construction should discuss the projects material inspection requirements with the METS structural materials representative. Once the oversight engineer is assigned the oversight project, the oversight engineer needs to have discussions with the METS structural materials representative to ensure awareness of the cooperative agreement provisions for reimbursement. In addition, the oversight engineer provides the METS structural materials representative with the appropriate charge codes and ensures that the METS structural materials representative makes the charges appropriately. When the Division of Accounting receives the charges to that expenditure authorization (EA), they will bill the local agency. To make sure the EA is properly set up for reimbursed work charges at the start of the project; the oversight engineer should confer with Division of Accounting before the start of construction.

An updated list of the METS structural materials representatives can be obtained at this web site:

<http://www.dot.ca.gov/hq/esc/Translab/smforms/StructuralMaterialsRepresentatives.pdf>

3-201B Onsite Materials

The resident engineer is responsible for accepting or rejecting all onsite materials. All materials shall be approved before placement or incorporation into the work. Material tags shall be collected, matched with Form TL-0029, and placed in the project files. Certificates of compliance shall be collected for materials

listed on Form TL-0028 and placed in the project files. The resident engineer is responsible for accepting or rejecting material delivered to the job site, which has not been released by METS and may be accepted by a certificate of compliance. The resident engineer must complete and place in the project files a Form CEM-4102 for the materials accepted onsite by the resident engineer. The contractor must provide the certificates and the material must be accepted by the resident engineer before incorporating the material into the project. Only fabricated material for which the resident engineer has received a Form TL-0028, "Notice of Materials to be Inspected," or TL-0029, "Report of Inspection of Material," can be incorporated into the project. The oversight engineer spot-checks the project files to verify the documentation is in the files.

3-201C Buy America Requirements

All federal-aid projects shall conform to the Buy America requirements as outlined in Section 3-605, "Certificates of Compliance," of the *Construction Manual* and the special provisions. The resident engineer is required to ensure that the certificates contain the required information, and that there are certificates for all the iron and steel products that are incorporated permanently into the project. The oversight engineer should spot-check the files quarterly for QA.

If the contractor requests a waiver of the Buy America requirements above the minimal amount that is allowed in the Section 3-605, "Certificates of Compliance," of the *Construction Manual* and the project special provisions, prior approval from the FHWA engineer is required for any Buy America waiver. The FHWA's prior approval can only be granted upon receiving concurrence from the FHWA headquarters in Washington D.C. Buy America waiver has not been delegated to Caltrans or local agencies. Use of foreign iron or steel on a federal-aid project can make the full cost of the project ineligible for federal reimbursement. Local agencies can not justify the use of foreign iron and steel products by saying they are using their own funds for purchases and installation. Even \$1.00 of federal-aid funds on a project makes the whole project subject to the Buy America requirements.

3-201D Onsite Testing

Acceptance tests must be performed on all material delivered that will be incorporated into the work as required by the *Construction Manual* and contract documents. The resident engineer is responsible for ensuring that the appropriate number of acceptance testing samples are taken and tested before accepting the work. The local agency's laboratory performs the acceptance tests and forwards the results to the resident engineer. The oversight engineer spot-checks the files quarterly to verify that these procedures are followed in accordance with Caltrans methods and frequencies. The resident engineer must provide documentation showing that the local agency has an approved Quality Assurance Program (only for federal-aid projects) and that all local agency employees, consultant employees and laboratories contracted by the local agency are certified by Caltrans before performing acceptance sampling and tests. When California Test Methods are used, a Caltrans certified Independent Assurance Sampler and Tester certifies acceptance testers. Similar to a Caltrans construction project, local agencies and consultants are considered certified if issued a Form MR-0111, "Certificate of Proficiency for an Acceptance Tester," by district independent assurance staff and are on statewide certified tracking system. When local agencies use test procedures other than California Test Methods, refer to the Caltrans *Independent Assurance Program Manual*. (See FL-5, "Material Testing Process.")

3-201E Specialty, Federal Highway Administration, and Quality Assurance Testing

Arrange for QA testing and specialty testing by Caltrans for the local agency as stated in the cooperative agreement. Specialty testing is outlined in Section 6-102F, "Special Samples and Tests," of the *Construction Manual*. Specialty Tests are materials or foundation tests for special problems or requirements not normally anticipated. Specialty testing should be agreed upon with METS, local agency and resident engineer before the start of construction if possible. QA testing frequency depends on the size of the project and on the history of the local agency's laboratory. If Caltrans laboratory personnel are

available, the oversight engineer should schedule the lab to perform periodic QA checks on the various test methods. For oversight projects, the FHWA samples and tests are considered specialty tests.

3-201F Mix Designs

Asphalt concrete and portland cement concrete mix designs must be acceptable to the Caltrans district laboratory. The contractor's proposed mix design shall be submitted with Form CEM-3101, "Notice of Materials to be Used," to the oversight engineer. Forward a copy of the proposed mix design to the district's laboratory for an acceptability review. The oversight engineer and the Office of Structure Construction oversight engineer (for concrete structures) must review and approve asphalt concrete and portland cement concrete mix designs.

3-201G State Furnished Material

Arrange to have Caltrans provide state furnished material as specified in the special provisions and cooperative agreement. The contractor shall submit a materials request to the local agency's resident engineer. The materials request is forwarded to the oversight engineer for processing. Monitor the local agency's payment for state furnished materials when payment is required by the cooperative agreement.

The reimbursement of state furnished materials is tracked by the Division of Accounting in the following manner: The cooperative agreement in conjunction with the designated EA will specify that charges will be billed to the local agency. When state furnished materials are ordered, the appropriate EA is used. When the Division of Accounting receives the charges to that EA, they will bill the local agency. Discuss establishing the proper EA for reimbursed work charges with the Division of Accounting at the start of the project.

3-202 Construction Activities

3-202A Preconstruction Conference

The resident engineer must inspect contractor activities as specified within the cooperative agreement. Before the start of work, communicate expectations to the resident engineer through a discussion of contract requirements, enforcement procedures, safety, and other pertinent requirements.

Complete CL-1, "OSE's Preconstruction Checklist."

- Schedule a meeting with the resident engineer before the resident engineer's preconstruction conference with the contractor. Complete CL-2, "Local Agency and OSE's Preconstruction Conference Checklist," during the meeting.

Attend the preconstruction conference with the resident engineer and contractor.

- Review the critical path method schedule with the resident engineer.
- See Section 2-19.0, "Administration of Special Funded Projects," of the *Bridge Construction Records and Procedures Manual*, for inspection responsibilities for projects involving structure work.

3-202B Construction Surveying

Construction surveying shall be performed either by the contractor, the local agency or Caltrans depending on the requirements of the cooperative agreement. Construction staking must be done in accordance with Chapter 12, of the *Caltrans Surveys Manual and Staking Information Booklet*. Provide the appropriate staking request forms if Caltrans is doing all or part of the construction surveying. The district's surveys unit should be notified when any construction surveying is performed by the local agency or contractor so district surveys can perform QA for field surveying. All surveying, construction or otherwise, performed by a local agency or contractor must meet all QC and QA guidelines as established by the district survey unit and right-of-way unit. The district's surveys unit and right-of-way unit should perform a QA review of the Record of Survey maps showing the new right-of-way lines. The

setting of right-of-way monuments and filing of the monument maps (Record of Survey maps) with the county surveyor is the responsibility of whomever prepares the right-of-way maps and legal descriptions. Contact the district's surveys unit and right-of-way unit to determine document types for which they require copies.

3-202C Lane Closures and Traffic Control

The resident engineer shall follow the approval process for lane closures as established by the encroachment permit or as approved. Approve a process that complies with the Caltrans district requirements. (See FL-7, "Lane Closure Approval Process.") As on Caltrans administered projects, the resident engineer reviews the contractor's lane and ramp closure requests; however, the request should be processed through the oversight engineer to the district traffic manager. On major projects where there may be many lane closure requests, the resident engineer may be asked to work directly with the district's Office of Traffic Management. This may be done only when there is confidence that this task will be done in accordance with processing requirements for lane closures. Noncompliance with lane closure procedures can be cause for suspension of the encroachment permit.

Regularly review the Traffic Management Plan, lane closures and detours during construction of the project. The time spent reviewing the Traffic Management Plan, lane closures and detours may be reduced when it is determined that the lane closures and detours are being placed in accordance with the Traffic Management Plan and contract requirements, including approved contract change orders.

3-202C (1) Construction Zone Enhanced Enforcement Program

Construction Zone Enhanced Enforcement Program (COZEEP) involves hiring the California Highway Patrol (CHP) to help with traffic control in a work zone. On oversight projects, COZEEP can be paid for with state or local agency funds. The preferred option is for the local agency to obtain a COZEEP agreement directly with the CHP if no state funds are allocated for COZEEP, and the cooperative agreement or encroachment permit does not require COZEEP for major projects involving two or more lane closures on freeways and expressways. If state funds have been provided for COZEEP, it will be stated in the cooperative agreement. In addition, a valid Caltrans phase 4 Expenditure Authorization (EA) needs to be in place, for accounting to be able to pay the invoices. Since our interagency agreement is between the CHP and Caltrans, the accounting system will not allow payment of invoices if a valid Caltrans EA does not exist.

If COZEEP will be provided, the CHP should attend the preconstruction conference with the contractor in order to discuss the CHP services and how they will fit with the order of work. The resident engineer should be responsible for inviting the CHP to the meeting. If state funds are allocated for COZEEP, help the resident engineer to coordinate usage of COZEEP. This coordination involves making the resident engineer familiar with CHP internal requirements, constraints and procedures. Review established procedures with the resident engineer to request COZEEP. QA ensures that COZEEP is used properly so that relations with the CHP and the traveling public are not jeopardized.

3-202D Safety

3-202D (1) Caltrans Personnel Responsibilities

All Caltrans QA field staff must read and sign the local agency's code of safe practices before entering the construction site. A copy is retained and placed in the local agency's contract files. If the code of safe practices is not available, the code of safe practices developed for Caltrans employees shall be used. Caltrans employees must follow the requirements of the *Caltrans Safety Manual* on all oversight projects.

Point out work and safety items that do not comply with both Caltrans and the Division of Occupational Safety and Health (Cal/OSHA) standards, and discuss possible remedies with the resident engineer. If there are work deficiencies that are not being resolved, that portion of the work may be suspended by the authority provided within the encroachment permit and the cooperative agreement. A meeting between the local agency's public works director or executive director and the district construction deputy director may be required to resolve deficiencies. Work will be allowed to resume only after an agreement has been reached.

3-202D (2) Public

The oversight engineer is authorized to stop the contractor's operation wholly, or in part, and take appropriate action when public safety is jeopardized. Caltrans ensures that public safety and convenience is maintained whenever work is performed under an encroachment permit within the state highway right-of-way. This applies to all aspects of the work such as: lane closures, signing, night work, detours, dust control, quality of temporary pavements, crash cushions, temporary railings, pavement transitions, falsework, shoring and delineation. Regularly inspects the job sites for safety compliance and possible deficiencies. If any deficiency is observed, then send a written notice to the resident engineer directing the resident engineer to correct the deficiency. Once the deficiency is corrected, a written notice describing the resolution of the deficiency should be sent to the resident engineer and documented in the diary.

3-202D (3) Contractor

The contractor is bound by the conditions and provisions of their encroachment permit and the encroachment permit issued to the local agency. Overseeing contractor safety is the responsibility of the resident engineer. If the oversight engineer has safety concerns regarding contractor activities, the oversight engineer shall notify the resident engineer immediately. If the resident engineer or the project staff is unavailable the oversight engineer is authorized to stop the contractor's operation wholly, or in part, and take appropriate action when public safety is jeopardized.

3-202D (4) Accident and Incident Reporting to the District Office and the Division of Construction

The resident engineer must report all major accidents and incidents within the limits of the project to the oversight engineer immediately. In accordance with established reporting policies outlined in the Section 2-106, "Accident Reports and Investigation," of the *Construction Manual*, report all major accidents and incidents involving the public or construction personnel in accordance with the *Construction Manual* and district policy. District construction is required to report all fatalities occurring within the project limits to the Caltrans Division of Construction chief within two hours of the known fatality. Complete Form ES 603-A, "Report to Attorney of Potential Claim," and file the report in accordance with the procedures established by Caltrans district offices.

3-202E Water Pollution Control

The contractor and resident engineer are responsible for water pollution control (WPC), with a QA role from the oversight engineer. The contractor, the resident engineer and all local agency field personnel who are responsible for WPC implementation, inspection and maintenance must complete the 24 hours of Caltrans approved WPC training. This requirement ensures that field personnel conduct their work in a manner consistent with WPC standard provisions, NPDES Permit requirements and best management practices (BMPs). Local agency projects are subject to inspections from the Caltrans district construction storm water coordinator, the storm water task force and the oversight engineer. Verify that the resident engineer is ensuring that all WPC measures are completed as summarized below:

- All projects within the state highway right-of-way that disturb less than 1 acre must comply with the requirements in Section 7-1.01G, of the *Standard Specifications* and the special provisions.

- All projects within the state highway right-of-way that disturb more than 1 acre must comply with water pollution control requirements as stated within Section 7-101G, the *Standard Specifications*, the special provisions, and the provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit.
- Verify that the Notice of Construction (NOC) has been submitted to the RWQCB and the storm water pollution prevention plan (SWPPP) has been approved before construction begins for projects within the state right-of-way covered by Caltrans NPDES permit.
- Verify that the Notice of Intent (NOI) has been submitted to the RWQCB before construction begins for projects that include work that disturbs more than one acre outside the state right-of-way. Both NOC and NOI are required for applicable projects.
- Verify RWQCB staff are invited to preconstruction meetings for SWPPP projects.
- Verify that the resident engineer receives, reviews, and approves a project SWPPP or Water Pollution Control Plan (WPCP). Verify that the resident engineers reviews and approves all amendments to the approved WPCP/SWPPP to reflect current field operations.
- Ensure that soil disturbing construction activities do not start until the SWPPP or WPCP is approved or conditionally approved by the resident engineer.
- The oversight engineer reviews and concurs with the SWPPP or WPCP. The oversight engineer should coordinate with the district construction storm water coordinator in the review of all SWPPP projects. The oversight engineer should coordinate with the district construction storm water coordinator in the review of WPCP if a project is located in an environmentally sensitive area. The resident engineer shall notify the oversight engineer and the construction storm water coordinator immediately of any potential noncompliance discharges into the waters of the state. A draft report of noncompliance shall submit a draft to the oversight engineer and the construction storm water coordinator. The construction storm water coordinator will then forward the report to the NPDES coordinator for submittal to the RWQCB.
- The oversight engineer maintains a WPC file that includes confirmation that all critical WPC milestones are met. This file should include the following:
 1. Record of transfer of information (resident engineer file)
 2. NOC and NOI
 3. SWPPP or WPCP approvals
 4. SWPPP or WPCP and amendments
 5. WPC document submittals
 6. SWPPP Annual Construction Activity Certifications
 7. Copies of RWQCB or other agency notices, violations and orders
 - Copies of Proposed Notices of Non-Compliance/Discharge Reports
 8. Notice of Construction Completion (NCC) and Notice of Termination (NOT).
 9. Resident engineer, oversight engineer, construction storm water coordinator, storm water task force, and contractor's inspection checklists.
 10. Copies of the NPDES and other applicable permits

The oversight engineers WPC file shall be archived in its entirety upon completion of the project and maintained for a minimum of three years.

- Verify that the resident engineer has a minimum of 24 hours of Caltrans approved WPC training and has designated a responsible person for conducting WPC inspections. This person must have a minimum of 24 hours of Caltrans approved WPC training.
- Verify that the resident engineer requires the contractor to comply with the WPC requirements.
- Verify that the resident engineer has all SWPPP or WPCP deficiencies corrected immediately.
- Cooperate with the RWQCB and other regulatory agencies.
- A copy of the NCC and NOT are forwarded to the oversight engineer for issuance to the RWQCB, district construction storm water coordinator and the district NPDES coordinator.
- Cooperate with the district construction storm water coordinator and the storm water task force.
- If noncompliance continues to occur after formal notification, be prepared to suspend the encroachment permit work except for Water Pollution Control remediation. Refer to Chapter 5, “Deficient Contract Administration and Sanctions.”
- Conduct a final walk-through of the project with the maintenance superintendent or region manager pursuant to Section 5-006 and 7.18 of the *Construction Manual*.
- After final soil stabilization, a NCC and NOT shall be submitted to the RWQCB for projects covered by the NPDES permit.

3-202F Caltrans Utility Services

Most oversight projects involve modification or additions to Caltrans utility service. For example, signal systems and street lighting involve electrical services just as landscape systems involve electrical and water services. Items to check before the start of construction are as follows:

- Upon first reviewing the contract plans, highlight changes and additions to Caltrans utility services.
- For electrical systems, verify the service points with the district electrical specialists, the resident engineer, and the electrical company in accordance with district procedures.
- For water systems, verify the service points with the maintenance landscape supervisor or district landscape architect, the resident engineer, and the water company in accordance with district procedures.

3-203 Cost Reduction Proposals for Structures

Since all oversight projects are required to use the Caltrans *Standard Specifications* as part of their contract, the local agency’s construction contractor can submit a cost reduction proposals to potentially reduce construction costs.

From a monetary aspect, cost reduction proposals are most viable when the savings in construction costs exceed the costs needed to develop and review the cost reduction proposal and results in net savings to the project team. Cost reduction proposals generally become undesirable, however, when the review costs exceed the sponsoring agency’s portion of the construction savings.

Section 3-514, “Cost Reduction Incentive,” of the *Construction Manual* contains general guidelines that explain how to process cost reduction proposals. The guidelines do not specifically address the roles, responsibilities, and standards required to process a structure’s cost reduction proposals for an oversight project. This section outlines the roles, responsibilities, standards, and procedures required to obtain design reviews and approvals of structure cost reduction proposals in a timely manner. Portions of cost

reduction proposals that involve non-structure items follow district procedures for review, input, and technical approval and FHWA approval requirements for cost reduction proposals contract change orders.

3-203A Roles and Responsibilities

The roles and responsibilities for developing and processing a structure cost reduction proposal are outlined below.

3-203A (1) Contractor

- Conceptualizes and proposes cost reduction proposals.
- Develops the documents needed to support and construct the change.
- Provides the design engineering construction support associated with the change.
- Performs the construction work of the change.

3-203A (2) Resident engineer

- Local agency's point of contact.
- Leads, coordinates and facilitates interaction for the overall cost reduction proposal development, input, and reviews with the contractor, the oversight engineer, the Office of Structure Construction engineer, and the Office of Special Funded Projects liaison engineer.
- Reviews cost reduction proposals for feasibility, constructability, and compliance with the construction contract.
- Determines if a cost reduction proposal is cost effective.
- Provides the final cost reduction proposals approval in the form of a contract change order.

For the purposes of this section, it is assumed the resident engineer also performs the duties of a structure representative as outlined in the *Construction Manual*.

3-203A (3) Structures – Office of Special Funded Projects - Liaison Engineer

- Caltrans lead for structure cost reduction proposals review and concurrence.
- Provides input relative to feasibility and cost effectiveness of the proposed cost reduction proposals.
- Obtains reviews and concurrence from local agency's consultant designer.
- Obtains reviews and concurrence from the necessary Division of Engineering Services.
- Performs QA of local agency's design consultant review and concurrence, and resident engineer's reviews and approvals.
- Performs reviews for conformance to Caltrans standards.
- Provides the final design concurrence.

3-203A (4) Caltrans Project Manager

- Performs any necessary communication and coordination with sponsoring agencies and ensures project objectives are met.
- Works with the local agency to revise the cooperative agreement, especially reimbursing Caltrans for cost reduction proposals review costs.
- Performs scope change concurrence and administers reassignments and terminations.

3-203A (5) Local Agency

- Provides concurrence with the cost reduction proposals changes and the impacts on project costs and schedules.
- Makes the engineer of record available to review cost reduction proposals.
- Reimburses Caltrans for review costs.
- Ensures cost reduction proposals are cost effective from a total project cost perspective, which includes deductions of review costs from the local agency's portion of the direct construction cost savings.

3-203A (6) Local Agency's Designer of Record

- Attends cost reduction proposals meetings.
- Reviews and concurs on feasibility and cost effectiveness.
- Reviews for structural integrity and ensures conformance to project design standards.

3-203A (7) The Office of Structure Construction Engineer

- Reviews concepts and designs for feasibility, constructability, cost effectiveness, and conformance to construction standards.
- Verifies the resident engineer's procedures to ensure that the interests of Caltrans are adequately addressed.
- Ensures that the resident engineer or structure representative is performing the necessary coordination with the Office of Special Funded Projects liaison engineer.

3-203A (8) Oversight Engineer

- Acts as a main point of contact for Caltrans.
- Provides written approval to allow a cost reduction proposals change to the approved plans, specifications, and estimate (PS&E).

3-203B Development and Review

The *Construction Manual* discusses stages of cost reduction proposals development, which can be summarized as follows:

- Conceptual Proposal
- Preliminary Proposal
- Complete Proposal

The cost reduction proposals development must proceed through the incremental stages shown above. In each stage, the contractor develops and submits proposals to the resident engineer for input and review. Once received, the resident engineer must review the proposal to make sure it is complete before forwarding to the oversight engineer, the Office of Structure Construction engineer, and the Office of Special Funded Projects liaison engineer for input and review.

The cost reduction proposals development should not proceed to the next stage until concurrence is obtained from the oversight engineer, the Office of Structure Construction engineer, and the Office of Special Funded Projects liaison engineer. Through all stages, the resident engineer should arrange meetings with the contractor, oversight engineer, the Office of Structure Construction engineer, the Office of Special Funded Projects liaison engineer, designer of record, and other essential representatives to discuss and resolve issues.

The cost reduction proposals development stages are outlined below.

3-203B (1) Conceptual Proposal

The conceptual proposal stage begins when the contractor informs the resident engineer of the possibility of pursuing a cost reduction proposal and the general parameters the cost reduction proposal will involve. The resident engineer should obtain the following parameters from the contractor:

- The potential structural changes
- The reasons for potential changes
- The identity of the designers who will develop the cost reduction proposals
- The identity of the designers who will provide construction support for the changes
- The probable timeline desired to implement the change

It is a violation of Section 2-1.056, of the *Standard Specifications* and the cooperative agreement for a contractor to use the designer of record to prepare the cost reduction proposal. If the contractor proposes to use the designer of record to prepare the cost reduction proposal, the oversight engineer returns the cost reduction proposal to the resident engineer. Written notification that Caltrans will not take further action on the cost reduction proposal until the local agency and contractor comply with the cooperative agreement and contract will be sent to the contractor by the resident engineer.

If the resident engineer considers the cost reduction proposal to be a viable option, the resident engineer meets with the oversight engineer and the Office of Structure Construction engineer to discuss the cost reduction proposal. The resident engineer can not approve the cost reduction proposal. The cooperative agreement requires that the oversight engineer review and agree to all design and specification changes in advance of the contractor performing the work.

After the meeting, if the Office of Structure Construction engineer has found the information complete, the Office of Structure Construction engineer sends the cost reduction proposal to the Office of Special Funded Projects liaison engineer.

The Office of Special Funded Projects liaison engineer reviews the cost reduction proposal to ensure the following:

- The proposal is structurally feasible, cost effective, and has merit.
- The local agency's designer of record concurs with the proposal and is available to perform reviews in a timely manner.
- The Division of Engineering Services agrees with the proposal.
- The local agency is willing to reimburse Caltrans for the cost reduction proposal review costs and agrees with any contract schedule changes.

As a part of the conceptual proposal stage, the resident engineer should lead a second meeting with the oversight engineer, the Office of Structure Construction engineer, the Office of Special Funded Projects liaison engineer and the contractor to discuss the concept and different considerations involved in developing the cost reduction proposal further. If the project is a federal-aid project, the FHWA engineer shall be invited to attend the meeting. The meeting should address the following items:

- Design criteria - the most current design standards and practices are required
- Reports and documents that the contractor has to prepare
- Review times
- Schedule for further cost reduction proposal development

- Estimate of construction cost savings
- Estimate of the Caltrans reimbursed work costs required for review concurrence
- FHWA approval requirements

If after the meeting, a decision is made to go forward with the cost reduction proposal, all Caltrans review and concurrence costs for the cost reduction proposal following the meeting is considered reimbursed work. The oversight engineer prepares an “Advance Deposit Application” to cover the Caltrans reimbursed costs until the cooperative agreement is amended. Caltrans and the local agency execute the Advance Deposit Application and the local agency deposits an amount equal to the Caltrans estimate of costs for review and concurrence of the cost reduction proposal. Caltrans personnel shall not proceed with any work on the preliminary proposal without execution of the Advance Deposit Application and receipt of the advance deposit.

3-203B (2) Preliminary Proposal

The preliminary proposal stage begins when the contractor further develops the concept, identifies all changes and shows the changes have merit in design and construction. In this stage, the contractor must submit the following:

- Sufficient preliminary details that show the construction work needed to implement the change
- Sufficient preliminary analysis that shows the general design approach and the general affects on all pertinent structures elements
- Analysis of the cost reduction proposal estimated cost and net savings.

The contractor must develop the preliminary proposal up to the point of commencing final design. As part of the preliminary proposal stage, the contractor will prepare final and complete design analysis and details.

The resident engineer will coordinate the review and concurrence from the designer of record. The resident engineer shall send the oversight engineer, the Office of Structure Construction engineer, and the Office of Special Funded Projects liaison engineer, the designer of record, concurrence before they begin their review of the contractor’s preliminary proposal. The Office of Special Funded Projects liaison engineer will be responsible for coordinating the review and concurrence from the pertinent Division of Engineering Services units.

Reviews must be conducted by the resident engineer, the oversight engineer, the Office of Structure Construction engineer, and the Office of Special Funded Projects liaison engineer.

When reviewing the preliminary proposal, check for the following:

1. Changes that are structurally adequate, based on the proper parameters, are constructible, and will conform to standards
2. Necessary supporting reports and documents, including plan details, calculations, foundation reports, and hydraulic reports
3. Concurrence from the designer of record and pertinent Division of Engineering Services units.
4. The cost reduction proposal will result in a net saving after review costs are considered.

3-203B (3) Complete Proposal

The complete proposal must contain plan details, calculations, specifications, foundation reports, hydraulic reports, an estimate of the construction cost savings and other documents necessary to support the change. All documents must conform to the requirements outlined later in this section.

The complete proposal must be reviewed by the resident engineer, Office of Special Funded Projects liaison engineer and others to determine the acceptability of the cost reduction proposal. The Office of Special Funded Projects liaison engineer coordinates design reviews through the designer of record and performs the required QA.

3-203C Structure Related Cost Reduction Proposal Design Documents

Structure design documents shall be developed by the contractor to support the cost reduction proposal. The documents must meet the same quality standards as required in the cost reduction proposal section of the Office of Special Funded Projects, *Information and Procedures Guide* as structure PS&E documents and supporting documents. Documents may include, but are not limited to, plan details, specifications, quantity calculations, structure calculations and independent check calculations, foundation reports, and hydraulic reports.

Documents that do not meet the standards are returned to the contractor and further reviews shall not proceed until documents of sufficient quality are submitted.

The exact documents required from the contractor for the different submittals depend on the scope of the proposed change and must be determined by the resident engineer with input of the Office of Special Funded Projects liaison engineer and others who will perform reviews.

The approximate number of documents required by the Office of Special Funded Projects liaison engineer and approximate review times for the different proposal stages can be found in the cost reduction proposal section of the Office of Special Funded Projects, *Information and Procedures Guide*.

Chapter 4 Project Completion

Section 1 Encroachment Permit and Cooperative Agreement Completion

The local agency and the contractor are required to notify Caltrans when the requirements of the encroachment permit and the cooperative agreement have been met. Completing Form TR-0128, “Notice of Completion Card,” provides notification. Although the contractor was issued an encroachment permit, this does not constitute contract acceptance by Caltrans. There is only a satisfactory completion of the encroachment permit requirements by the local agency and the contractor. The encroachment permit and cooperative agreement requirements are typically fulfilled when the following conditions are met:

- Construction is completed in full compliance with the cooperative agreement and encroachment permit conditions.
- All required encroachment permit and cooperative agreement project documentation are delivered to Caltrans.
- All necessary highway right-of-way is conveyed to the state.
- Maintenance agreements have been completed and executed.
- Notice of Construction Completion (NCC) has been submitted to the RWQCB once construction for projects covered by the NPDES permit is completed.

Before acceptance of the construction contract by the local agency, it is recommended that representatives from Caltrans, the local agency, and the contractor conduct a semifinal inspection of the project. Completing the semifinal inspection before the contractor has demobilized and left the project ensures that the contractor can address any discrepancies that are found by Caltrans or the local agency. For the contractor to remobilize can be costly.

The final inspection of the project is made within one week of notification. If the local agency has not complied with all terms and conditions of the encroachment permit, inform the local agency of the discrepancies and request corrections. On all projects, corrections shall be detailed in writing.

Completion of construction of the project does not imply that the responsibilities of the local agency and contractor have been fulfilled for closing out of the encroachment permit file. All required project documentation shall be submitted and acceptable to Caltrans before closeout of the encroachment permit file. All new encroachment permits will include a maximum time period for the local agency to submit required project documentation after the local agency’s construction contract acceptance. For oversight projects without a cooperative agreement, it is usually 30 calendar days. For oversight projects, with a cooperative agreement, it is usually 90 calendar days for projects with less than 300 plan sheets, and 180 calendar days for projects with 300 or more plan sheets.

Failure of a local agency to provide required project documentation within the timeframe required in the encroachment permit can lead to Caltrans requiring the local agency to provide construction contract administration documents bond on future oversight projects. Report local agencies that fail to provide the required project documentation, within the required time frame after completion of the project, to the district as-built coordinator, project manager, district permits engineer and district construction. The information is kept on file with district project management for use in determining which local agencies are required to provide construction contract administration documents bond on future oversight construction projects. Once a local agency has submitted the required project documentation, it is at the discretion of the district director to remove the local agency from the list.

Depending on the requirements of the project cooperative agreement and encroachment permit, required project documentation may consist of the following:

- Requested contract records
- Survey and right-of-way documents requested by district survey and right-of-way offices
- As-built plans
- Microfilms
- Warranties
- Maintenance agreements
- Structure construction records *

The Office of Structures Construction required project documentation will be processed by the structure construction oversight engineer in accordance with the *Bridge Construction Records and Procedures Manual*. See Section 2-19.0 for job acceptance records required by the Office of Structure Construction and the corresponding submission responsibilities when the project includes structure work.

During construction, the service installation, energy, and water bills are usually paid by the local agency or their contractor. When the modifications or additions are completed, the electrical system will be inspected for compliance by the district electrical specialist and the utility company will be authorized to energize the system. Water system connections should be inspected by district landscape maintenance or the district landscape architect before acceptance. Upon acceptance of the contract by the local agency, notify their district electrical and water billing coordinator of the changes or additions to the district utility system. For most new signal or landscape projects, there will be a shared responsibility for the signal system and the landscaping. A maintenance agreement establishes how Caltrans and the local agency share the responsibility. This agreement should be executed before completion of construction and Caltrans accepts control and maintenance of the project.

When the work authorized by the encroachment permit and cooperative agreement has been satisfactorily completed, return completed Form TR-0129, "Completion Notice," to the district encroachment permit engineer's unit. Forward the project file and the required project documentation to the district's construction document coordinator for archiving. Ensure that copies, or originals, of selective required project documentation are distributed to the appropriate district units within the established times.

4-101 Projects with Documents Bond

Failure by the construction management consultant or local agency to provide required project documentation shall result in the local agency's documents bond being held. Form CEM-1101, "Documents Bond," lists the documentation the local agency is required to provide in order for their documents bond to be released. The bonding company shall be notified when the local agency has not delivered the required project documentation within the time frame set in the encroachment permit. Upon receiving satisfactorily completed required project documentation, as listed on the documents bond form, the local agency's documents bond shall be released.

4-102 Certification of Environmental Compliance

The resident engineer is responsible for ensuring that Certification of Environmental Compliance (CEC) is prepared and distributed as outlined in Section 7-108, "Certification of Environmental Compliance," in the *Construction Manual*.

The CEC will be signed by the local agency's responsible parties except when Caltrans was responsible for the environmental or design phase of the project.

Chapter 4

Section 2 Federal-Aid Project

In addition to the encroachment permit and cooperative agreement project completion requirements outlined in the previous section, all federal-aid projects shall follow the project completion procedures outlined in Chapter 17, “Project Completion,” of the *Local Assistance Procedures Manual*, except for the changes noted below:

- The oversight engineer assumes the duties of the district local assistance engineer except as noted.
- For all federal-aid projects, the resident engineer shall submit the “Local Agency Final Inspection Form,” Exhibit 17-C in the *Local Assistance Procedures Manual*, to the oversight engineer.
- For full oversight projects, the FHWA Form 1446C, “Final Inspection of Federal-aid Project,” Exhibit 17-B in the *Local Assistance Procedures Manual* is not required.
- For full oversight projects, the resident engineer will send a copy of the proposed final estimate after it is sent to the contractor. Send the CL-5, “FHWA Final Acceptance Checklist for Federal-aid Projects,” and other required forms on the checklist to the FHWA engineer with a copy of the proposed final estimate. Send updates to the information on the CL-6, to the FHWA engineer during the project completion process.
- For all federal-aid projects, submit the “Final Report of Utilization of Disadvantage Business,” Exhibit 17-F in the *Local Assistance Procedures Manual*, to the district local assistance engineer.
- For all federal-aid projects over \$1 million, on the National Highway System, the contractor is required to complete and submit Form FHWA 47 to the resident engineer. The resident engineer will review for reasonableness, accuracy, and forward to the oversight engineer. Forward Form FHWA 47 to district construction for processing and to the FHWA engineer with the CL-6.
- For full oversight projects, FHWA approval is required before a claim settlement payment to the contractor.
- Once all the claims are settled, and the local agency has made the last payment to the contractor, the resident engineer will submit the “Final Report of Expenditures,” Exhibit 17-M in the *Local Assistance Procedures Manual*, to the oversight engineer.
- For all local federal-aid projects, send the “Report of Expenditures” for processing to the district local assistance engineer.
- For all federal-aid STIP projects, send to the STIP project coordinator the “Final Report of Expenditure,” Exhibit 17-M in the *Local Assistance Procedures Manual*, for processing.
- The resident engineer shall furnish a full set of as-builts as outlined in the cooperative agreement.
- “Report of Completion of Structures,” Exhibit 17-J in the *Local Assistance Procedures Manual*, will not be used. Instead see Section 2-19.0, of the *Bridge Construction Records and Procedures Manual* for job acceptance records required by the Office of Structure Construction and the corresponding submission responsibilities when the project includes structure work.

Chapter 4

Section 3 Relief from Maintenance and Responsibility

When a local agency administers a construction contract and uses Caltrans' *Standard Specifications* as part of the contract documents, they will include the following or similar language in their contract special provisions:

Standard Specification: The 1999 edition of the Standard Specifications of the State of California, Department of Transportation. Any reference therein to the State of California or a State agency, office, or officer shall be interpreted to refer to the LOCAL AGENCY or its corresponding agency, office, or officer acting under this contract.

By including the above special provision, or similar language, the authority to grant "Relief from Maintenance and Responsibility" is transferred from the executive officer of the Department of Transportation to the executive officer of the local agency. The local agency has the contract with the contractor not Caltrans. Consequently, the local agency, not Caltrans, is automatically responsible for maintenance of the segment the local agency accepted. Standard language, or similar, in cooperative agreements states:

Upon completion and acceptance of the PROJECT construction contract by LOCAL AGENCY to the satisfaction of the STATE representative and subsequent to the execution of a maintenance agreement, STATE will accept control of and maintain, at its own cost and expense, those portions of PROJECT lying within the STATE'S right-of-way, except local roads delegated to LOCAL AGENCY for maintenance.

By the terms of the cooperative agreement, the state will only accept control and maintenance when:

- The construction contract is completed in its entirety and the contract is accepted by the local agency.
- The state representative is satisfied with the finished project.
- A maintenance agreement with the local agency exists.

The local agency may grant "Relief from Maintenance and Responsibility" to the contractor for a segment of contract limits, however, the local agency will still be responsible for maintenance and retains responsibility of that segment unless the three bullets noted above have been satisfied. An encroachment permit rider may be issued to alter the original scope of the encroachment permit to allow Caltrans to accept control and maintenance of that segment before satisfying the three bullets.

Chapter 4

Section 4 – Local Agency’s Job Records

When Caltrans requires the local agency to hold contract files, the retention period will be referenced in the cooperative agreement. For federal-aid projects, local agency construction contract project files are to be retained a minimum of three years after the final reimbursement or payment by Caltrans to the local agency. For additional information on federal record retention requirements, refer to Section 5.7, “Audit of Local Agency Expenditures, ” in the *Local Assistance Procedures Manual*.

Chapter 5 Deficient Contract Administration and Sanctions

As outlined in earlier chapters, the main function of the oversight engineer is to verify that the local agency's resident engineer is properly administering the project in conformance with the plans, specifications, cooperative agreement and encroachment permit. Perform this role by exercising the authority given in the cooperative agreement and encroachment permit. The cooperative agreement authorizes Caltrans to accept or reject the work, order any actions needed for public safety and the preservation of property, and ensure compliance with all provisions of the encroachment permit and cooperative agreement. Do this by periodically reviewing the project site and the contract records.

Section 1 Federal-Aid or State Funded Project

If it is found that the resident engineer is not performing required duties, even after several meetings (usually three) discussing the deficiencies with the resident engineer and the local agency's person in "Responsible Charge," the oversight engineer reports the situation to the deputy district director for construction. The deputy district director for construction shall then contact the local agency's Public Works Director or Executive Director to seek a solution to the problem. If the deputy district director for construction finds that the local agency has not corrected the deficiencies in a timely manner, the deputy district director for construction shall request the Division of Accounting to impose one of the following sanctions on the local agency, depending on the severity and circumstances of the deficiencies:

- Freeze progress payments for the federal-aid or state funded project until the deficiencies are corrected.
- Withdraw a percentage of federal or state funds from a project.
- Withdraw all federal or state funds from the project.

5-101 State Transportation Improvement Plan, State Highway Operation and Protection Program and Interregional Improvement Program projects

To freeze progress payments for State Transportation Improvement Plan (STIP) and State Highway Operation and Protection Program (SHOPP) projects, request the Caltrans project manager assigned to the project, to return future invoices unpaid. A detailed explanation should be sent with the request to the project manager who will attach it to the returned invoice. A copy of the request and explanation should be sent to the resident engineer.

5-102 Local Federal-Aid Projects

To freeze progress payments for local federal-aid projects such as Surface Transportation Program (STP), Congestion Mitigation Air Quality (CMAQ), Demo (pork-barrel) and other funds, e-mail or fax a request to return future invoices for the project to the local agency and a detailed explanation of the reasons why the invoices are to be returned unpaid to the district local assistance engineer.

5-103 Both State Transportation Improvement Plan, State Highway Operation and Protection Program projects and Local Federal-aid Projects

In both cases, send notification to resume payment of the invoices immediately after deficiencies have been corrected. Also, send copies of the requests and notifications to the FHWA engineer (for all federal-aid projects), the Division of Construction field coordinator, and to the local agency's Public Works Director or Executive Director. The local agency should be told that they can appeal the withholding of funds through the Division of Construction's field coordinator.

To withdraw a percentage of all of the federal or state funds from a project, the deputy district director for construction should contact their Division of Construction's field coordinator for guidance.

Caltrans is required to act on FHWA's behalf on federal-aid projects as part of the stewardship agreement between Caltrans and the FHWA. Under the stewardship agreement, Caltrans agreed to be responsible for assuring that federal-aid projects are administered to meet federal-aid-required procedures and standards. Allowing the local agency to violate federal requirements can result in the FHWA withholding federal funds from Caltrans who in turn would have to withhold funds from the local agency. FHWA goes through Caltrans as the responsible agency for funds payment or retention.

This requirement also applies when a local agency is receiving state funds. If a local agency is violating the state legislative requirements for those funds, Caltrans must ensure that the local agency uses the funds as required or takes back the funds from the local agency.

Whether or not sanctions are imposed against a local agency, the local agency shall be expected to develop and implement an action plan to correct deficiencies. Local agencies will be given adequate time to develop and implement their action plan. Failure to quickly correct deficiencies by the local agency is grounds for imposing additional sanctions.

The deputy district director for construction is asked to keep their Division of Construction's field coordinator informed about problems they are having with local agencies not abiding by federal or state requirements.

Chapter 5

Section 2 Oversight Project

Oversight projects with an estimated construction cost of \$1 million or more in the state highway right-of-way, are constructed under the terms of a cooperative agreement or highway improvement agreement for private entity sponsored project and encroachment permit. Oversight projects with an estimated construction cost of less than \$1 million will generally be constructed only under the terms of an encroachment permit. Certain project types such as those involving signal construction, landscaping, or soundwalls, with an estimated construction cost of less than \$1 million, may still require a cooperative agreement.

5-201 Encroachment Permit

As stated earlier, a local agency is granted permission to enter onto the state highway right-of-way and construct an approved facility under the encroachment permit. The encroachment permit is a valid contract between the local agency and Caltrans. Under the encroachment permit, Caltrans has the right to revoke the encroachment permit for violation of the encroachment permit conditions, special provisions, or other stipulated requirements. Without an encroachment permit, the local agency and their contractor are required to suspend all work on the project site. Any work Caltrans does to put the project site back into a safe operating condition or restore it to the original condition, will be billed to the local agency, the local agency's contractor, and the contractor's bonding company depending on the circumstance involved in the encroachment permit being revoked. The local agency and their contractor can be required to provide additional bonding, to deposit additional funds, and to pay additional fees in order for the encroachment permit to be reissued.

Before revoking the encroachment permit, meet with the resident engineer to discuss the issues, ask for an action plan to correct any deficiencies, and discuss possible Caltrans action if the deficiencies are not corrected. If the resident engineer does not correct the deficiencies after several meetings (usually 3), contact the local agency's person responsible for the encroachment permit, and discuss the situation. The oversight engineer should discuss the situation with the deputy district director for construction and the district encroachment permit engineer before having the encroachment permit revoked.

5-202 Cooperative Agreement

As stated earlier, a cooperative agreement is a legally binding contract between Caltrans and a local agency. For those projects administered by a local agency, the following language (or similar language) is included in the cooperative agreement:

Local Agency Agrees: To ensure that contract administration procedures shall conform to the requirements set forth in State's Construction Manual, Local Assistance Procedures Manual, Project Contract Documents, and the Encroachment Permit for construction of the Project.

The local agency has agreed that construction contract administration shall follow Caltrans requirements. The following (or similar) language is included in the cooperative agreement if the local agency does not want to conform to the Caltrans construction contract administration requirements:

If the Local Agency violates the terms and conditions of the Project construction encroachment permit, the State may require the Local Agency, at the Local Agency expense to return to its original condition or to a condition of acceptable permanent operation. If the Local Agency fails to do so, the State reserves the right to finish the Project or place the Project in satisfactory permanent operation condition. The State will bill the Local Agency for all actual expenses incurred and the

Local Agency agrees to pay said expenses within 30 days using the Local Agency funds or the State acting through the State Controller, may withhold an equal amount from future apportionments due the Local Agency from the Highway User Tax Fund.

Worst case, Caltrans can take over a project and complete it, then be reimbursed with gas tax funds that were due the local agency. Most local agencies would find this scenario unappealing. Discussing the various options and the possibility of withholding or canceling federal-aid funds should persuade the local agency and the resident engineer to conform to Caltrans requirements.

5-202A Discontinue Services of Resident Engineer and Staff

If the resident engineer, or staff, is not following Caltrans construction contract administration procedure as agreed to in the cooperative agreement, Caltrans can ask for removal of the resident engineer or staff. The following language (or similar language) is included in the cooperative agreement:

Local Agency agrees to consider any request by State to discontinue the services of any personnel considered by State to be unqualified on the basis of credentials, professional expertise, and failure to perform in accordance with the scope of work and/or other pertinent criteria.

Before requesting removal of the resident engineer, or staff, meet with the resident engineer to discuss the issues, ask for an action plan to correct the deficiencies, and discuss possible Caltrans action if the deficiencies are not corrected. If the resident engineer does not correct the deficiencies, contact the local agency's person in responsible charge and discuss the situation. Also, discuss the situation with the deputy district director for construction before requesting removal of the resident engineer or staff.

CL-1 Oversight Engineer's Preconstruction Checklist

NOTE: Enter N/A for any items not applicable to this project.

Local Agency _____ Dist/Co/Route/PM _____
Type of Work _____ Location _____
*Federal-Aid Project: Yes ___ No ___ Federal-Aid Project No. _____ N or E
Contract Amount \$ _____ Structures Work: Yes ___ No ___

Contacts (Enter those that are applicable to the project)

Phone Number

Local Agency contact _____	(____) ____-____
Structures Construction contact _____	(____) ____-____
Structures - Office of Special Funded Projects contact _____	(____) ____-____
District Project Management contact _____	(____) ____-____
District Design Oversight Engineer contact _____	(____) ____-____
District Maintenance contact _____	(____) ____-____
District Traffic Operations contact _____	(____) ____-____
District Traffic Management Center contact _____	(____) ____-____
District Materials Lab contact _____	(____) ____-____
District Construction Safety contact _____	(____) ____-____
District Labor Compliance contact _____	(____) ____-____
District Public Affairs contact _____	(____) ____-____
District Survey Office contact _____	(____) ____-____
District Right of Way engineering contact _____	(____) ____-____
District Construction Storm Water Coordinator _____	(____) ____-____
RWQCB contact _____	(____) ____-____
*FHWA Engineer contact _____	(____) ____-____

Cooperative Agreement

Copy of cooperative agreement or highway improvement agreement for construction phase received?

Yes ___ No ___

Agreement number _____

Does agreement include reimbursed work?

Yes ___ No ___

Is Caltrans required to provide state-furnished materials?

Yes ___ No ___

Accounting Procedures

Does the contract have a Caltrans EA? Yes ___ No ___
If yes, has project development activated the construction phase “3” EA? Yes ___ No ___
If Caltrans is to provide reimbursed services, has the EA been activated for reimbursed work? Yes ___ No ___
Are state funds included in the project? Yes ___ No ___

If yes, district contract person responsible for approval for funds transfer to local agency:

_____ (____) _____ - _____

NOTE: Contact the person responsible for approving funds transfers to establish a procedure to get concurrence before funds transfer.

Type of Encroachment Permit Issued

Local agency _____ Expiration date _____
Private interest _____ Expiration date _____
Contractor permit _____ Expiration date _____
Contractor bond expiration date _____
Permit riders (If a rider is issued, both the agency and the contractor need to obtain one)
• Agency rider _____ Expiration date _____
• Contractor rider _____ Expiration date _____

Local Agency Construction Contract Management Team

- Team and staff proposal received _____ date _____
- Approval of local agency’s in-house and/or consultant staff? Yes ___ No ___
- Staff substitution process developed? Yes ___ No ___
 1. Qualification submitted? Yes ___ No ___
 2. Do the qualifications meet the project requirements/scope? Yes ___ No ___
 3. Are the qualifications and experience verifiable? Yes ___ No ___
 4. Has Form TR-0133 been submitted and verified? Yes ___ No ___

(Complete this part if the local agency hired a consulting firm(s) for the team)

- Oversight engineer part of the interview panel for candidates? (If Yes complete part 1, if No complete part 2). Yes ___ No ___
 1. If Yes, interview guidelines developed? Yes ___ No ___
 - Resumes submitted and prescreened? Yes ___ No ___
 - Questions developed and approved? Yes ___ No ___
 - Scoring system for candidates developed? Yes ___ No ___
 - Interviews scheduled on _____ date _____
 - Approval of candidates? Yes ___ No ___

- 2. If **No**, resumes with qualifications submitted? Yes ___ No ___
- Minimum qualifications for candidates developed? Yes ___ No ___
- Scoring system for candidates developed? Yes ___ No ___
- Approval of candidates? Yes ___ No ___
- Staff substitution process developed? Yes ___ No ___
- Consulting firm(s) debarred? Yes ___ No ___

Preconstruction Meetings

- Only for federal-aid projects, send CL-3 “Resident Engineer Contract Provisions Checklist” to the resident engineer prior to the oversight and resident engineer preconstruction conference? Yes ___ No ___
- Discussed CL-2 “Preconstruction Conference Checklist” with resident engineer before the local agency and contractor preconstruction meeting? Yes ___ No ___
- Attended local agency and contractor preconstruction meeting? Yes ___ No ___

Contract Plans and Specifications

- Special provisions received? Yes ___ No ___
- Contract plans received? Yes ___ No ___
- Received project files from the oversight project development engineer? Yes ___ No ___
- Discussed PS&E and files with oversight project development engineer? Yes ___ No ___

Preconstruction Site Review

- Review job site with Caltrans maintenance supervisor Yes ___ No ___
- Established maintenance’s and contractor’s area of responsibility Yes ___ No ___

CL-2 Local Agency and Oversight Engineer Preconstruction Conference Checklist

Completed by Oversight Engineer at the Conference

Date _____

Local Agency _____	Dist/Co/Route/PM _____
Type of Work _____	Location _____
Federal-Aid Project: Yes ___ No ___	Federal-Aid Project No. _____ N or E
Contract Amount \$ _____	Structures Work: Yes ___ No ___

NOTE: For full oversight "N" projects, invite the FHWA engineer to the meeting.

1. Introductions

Include participant responsibilities and relation to project. (Can invite those people listed as "Contacts" on CL-1)

2. Construction Manual

Does the resident engineer have an up-to-date printed copy of the *Construction Manual*, or an electronic copy? Yes ___ No ___

Does the resident engineer have copies of the latest Construction Policy Bulletins and directives? Yes ___ No ___

Check the Division of Construction's Internet site for latest documents:

Manual Change Transmittals: <http://www.dot.ca.gov/hq/construc/manual2001/>

CPBc: <http://www2.dot.ca.gov/hq/construc/manual2001/CPBindex.HTM>

CPDs. <http://projdel.dot.ca.gov/construction/CPDirectives/cpdindx.htm>

3. Project Staffing (*Construction Manual*, Section 5-102, Category 1)

Is there a list of names and titles of all staff assigned to the project? Yes ___ No ___

Has the resident engineer prepared a "Resident Engineer Report of Assignment?" Yes ___ No ___

Comments:

4. Project Files (*Construction Manual*, Sections 5-102 and 5-104)

Is the resident engineer using the Caltrans uniform filing system? Yes ___ No ___

Discussed "As built" changes to be drawn on a set of plans or entered in a computer file per cooperative agreement requirement. "As-builts" need to be updated on a regular basis. Yes ___ No ___

Documents bonds? Yes ___ No ___

Project Record Review Schedule Developed? Yes ___ No ___

Comments:

5. Safety (*Construction Manual*, Section 2-105A)

Resident engineer has a construction code of safe practices in the file:

Yes ___ No ___

Comments:

6. Contract Schedule (*Construction Manual*, Section 3-805)

Contract time measurement: Working days _____ Calendar days _____ Other _____

First working or calendar day _____

CPM Schedule required:

Yes ___ No ___

7. Materials (*Construction Manual*, Chapter 6)

State furnished material included in contract:?

Yes ___ No ___

State's contact person for state furnished materials _____

Accounting procedures for state furnished materials established?

Yes ___ No ___

Lead-time for availability of state furnished materials?

Yes ___ No ___

Form CEM-3101, "Notice of Materials to be Used," submittal requirements discussed?

Yes ___ No ___

Relationship with METS and specialty tests discussed?

Yes ___ No ___

Testing requirements discussed (FL-4)?

Yes ___ No ___

Discussed local agency or consultant staff performing acceptance testing, either need Caltrans certification and are in Caltrans certified testers tracking system?

Yes ___ No ___

Discussed failing tests – acceptance and retesting requirements?

Yes ___ No ___

Discussed operating range failure?

Yes ___ No ___

Discussed contract compliance failure?

Yes ___ No ___

Discussed material on hand submittals review (if state funds involved)?

Yes ___ No ___

Discussed Mix Design approval?

Yes ___ No ___

Comments:

8. Weight Limitations (*Construction Manual*, Section 3-701D)

Discussed Caltrans policy on overloads hauled from outside of the project limits?

Yes ___ No ___

9. Construction Staking (*Construction Manual*, Section 3-506) (if applicable)

Method of staking reviewed?

Yes ___ No ___

Requirements for advanced notice reviewed?

Yes ___ No ___

DH-SP-16, "Request for Construction Staking," provided and discussed?

Yes ___ No ___

Establishment of priorities discussed?

Yes ___ No ___

Preservation of stakes and restaking charges discussed?

Yes ___ No ___

10. Air, Water, and Noise Pollution Control (*Construction Manual*, Section 7-104)

WPCP and SWPPP submittal review, schedule and approval requirements discussed? Yes ___ No ___

WPCP and SWPPP amendment submittal and approval requirements discussed? Yes ___ No ___

Storm Water Quality Handbooks (latest version) in the resident engineer office: Yes ___ No ___

Comments:

Resident engineer submitted a Form CEM-2002, "Notification of Construction," (NOC) Yes ___ No ___

Resident engineer submitted a "Notification of Intent," (NOI) Yes ___ No ___
Comments:

Discussed:

Form CEM-2001, "National Pollution Discharge Elimination System Annual Certification," due by June 15th of each year? Yes ___ No ___

WPC Manager and Inspector staffing Yes ___ No ___

Caltrans approved 24 hour WPC training requirement for WPC staff? Yes ___ No ___

CSWC, SWTF and contractor's inspection schedule and inspection report submittals? Yes ___ No ___

Monitoring weather reports by National Weather Service and BMP deployment? Yes ___ No ___

Storm water quality sampling requirements? Yes ___ No ___

Reporting potential notices of noncompliance and discharges? Yes ___ No ___

Fish and Game 1602 Streambed/Lake Alteration Agreement, if applicable? Yes ___ No ___

Other Environmental Permits or Requirements (such as Section 404 Permit for wetlands, Section 401 Water Quality Certification, and Coastal Zone Management Act)? Yes ___ No ___

Sound control requirements? Yes ___ No ___

Air quality requirements? Yes ___ No ___

Contractor's responsibility for conformance with the environmental mitigation requirements? (Construction Manual, Chapter 7) Yes ___ No ___

11. Environmental Hazards and Safety Procedures (Construction Manual, Section 7-106)

Discussed:

Notification of discovery of unknown hazardous materials and waste clean up procedures discussed (if encountered) as outlined in cooperative agreement? Yes ___ No ___

Hazardous waste storage and labeling requirements for material stored in Caltrans Right of Way? Yes ___ No ___

EPA ID number requirements (Caltrans usually obtains this when material is generated in Caltrans Right of Way)? Yes ___ No ___

12. Prosecution of Work

Start of work requirement discussed? Yes ___ No ___

Discussed Maintenance and safety review? Yes ___ No ___

Discussed Final inspection punch list? Yes ___ No ___

13. Public Traffic

Night work on the job: Yes ___ No ___

Requirements for handling public traffic discussed? (including pedestrians, bicycles, ADA) Yes ___ No ___

Lane closure notification discussed? Yes ___ No ___

Major closure notification requirements discussed? Yes ___ No ___
Discussed 15 day vertical and horizontal restriction notification forms ? Yes ___ No ___
COZEEP discussed? Yes ___ No ___
Comments:

14. Incident Reporting

Requirements discussed Yes ___ No ___

15. Contract Change Order Process

Discussed contract change orders requiring concurrence? Yes ___ No ___
Are all parties aware of the timeframe for design concurrence (FL-3)? Yes ___ No ___

16. Caltrans Utility Services

Have Caltrans Electrical Maintenance notification requirements versus utility notification (USA) been discussed? Yes ___ No ___
Inspection by Caltrans electrical specialists discussed? Yes ___ No ___
Changes to Caltrans water system discussed? Yes ___ No ___

17. OSE's Reviews

Has a job site review schedule been developed? Yes ___ No ___

18. Contractor Submittals

Has the resident engineer been asked to prepare a list of submittals the contractor is required to make as part of the contract.? Yes ___ No ___
(Resident engineer should prepare the list before the resident engineer and contractor preconstruction conference.)

19. Public Claims

How public claims are handled has been discussed? Yes ___ No ___

20. Structure Items

Has the Office of Structure Construction oversight engineer discussed BCM 2-19.0 requirements? Yes ___ No ___

21. Encroachment Permit

Discussed requirements in both encroachment permits (contractor's and local agency's) Yes ___ No ___
Discussed right-of-way maintenance by the local agency and their contractor? Yes ___ No ___

22. Progress Pay Estimates

Discussed oversight engineer reviews if federal or state funds are involved Yes ___ No ___

23. Labor Compliance

Discussed roles and responsibilities – federal-aid versus non-federal projects Yes ___ No ___

Local Agency's labor compliance officer, _____

24. Contractor Claims

Discussed roles and responsibilities – federal-aid versus non-federal projects Yes ___ No ___

25. Debarred Contractors and consultants

Discussed procedures when fraudulent tests or inspection reports are suspected Yes ___ No ___

Discussed the requirement to ensure that no debarred contractor or consultant is allowed to do work on the projects. Check the web site

<http://www.dot.ca.gov/hq/construc/>,

under "Debarred Contractors," whenever a list of subcontractors is submitted and for any substitution of subcontractors. Yes ___ No ___

26. Federal Requirements (Only for Federal-aid Projects)

• Local Assistance Procedures Manual

Does the resident engineer have access to a copy of the *Local Assistance Procedures Manual*?
Yes ___ No ___

• Project Staffing (*Local Assistance Procedures Manual*, Section 16-3, "Project Supervision and Inspection")

Who is the resident engineer? name _____

Is the resident engineer in "responsible charge" of the project? Yes ___ No ___

(Check at preconstruction conference.)

If no, who is the local agency's employee designated to be in "responsible charge" ?
name _____

- **DBE** (*Construction Manual*, Section 8-3) (*Local Assistance Procedures Manual*, Section 9-4, “Local Agency DBE Program”)

Reviewed DBE Information Form, DC-OE-19 or equivalent? Yes ___ No ___

Discussed Resident engineer’s responsibility to assure DBEs provide a commercial useful function?

Yes ___ No ___

Discussed DBE substitution requirements?

Yes ___ No ___

What was the contract DBE goal?

What is the contractor’s DBE goal?

If the contractor’s goal is less than the contract goal, is there a “good faith” statement in the project files?

Yes ___ No ___

For full oversight “N” project, did FHWA approve the “good faith” statement? Yes ___ No ___

Comments:

- **Prompt Payment** (*Construction Manual*, Section 3-909) (*Local Assistance Procedures Manual*, Section 9-4, “Local Agency DBE Programs,” Contract Provisions)

Have prompt payment requirements to subcontractors in the contract been discussed?

Yes ___ No ___

- **Materials Files** (*Local Assistance Procedure Manual*, Section 16.14, “Quality Assurance Program”)

Is the local agency’s quality assurance program (QAP) in the resident engineer’s office?

Yes ___ No ___

(Local agencies can not just reference Caltrans QAP – they need to have their own QAP.)

Has the local agency hired a consultant to do the materials testing for this project? Yes ___ No ___

(Skip the following questions if the answer is no.)

Is there a copy of the consultant’s QAP in the project files?

Yes ___ No ___

- **Environmental** (*Construction Manual*, Chapter 7) (*Local Assistance Procedure Manual*, Section 6.2, “An Overview of the Environmental Process”)

Is the environmental document or mitigation monitoring reporting record for this project in the resident engineer’s files?

Yes ___ No ___

Have you discussed the resident engineer’s responsibility for conformance with the mitigation requirements?

Yes ___ No ___

- **Project Funding** (*Local Assistance Procedure Manual*, Sections 3.1 “Project Authorization” and 16.8 “Project Files”) (*Construction Manual*, Section-5-2)

Does the resident engineer have a copy of the E-76 (Authorization to Proceed with Construction), and a copy of the Federal Detail Estimate, and Finance Letter?

Yes ___ No ___

Have you discussed federal non-participating work items?

Yes ___ No ___

- **Construction Project Information Signs**

Do the Project Information signs conform to Standard Plan T7 Construction Project Information sign ?

Yes ___ No ___

If no, has the FHWA Engineer approved the non-standard sign?

Yes ___ No ___

- **FHWA**

Discussed communication with FHWA engineers requirements as outlined in *Construction Manual*,
Section 5-007

Yes ___ No ___

Full oversight project (*Construction Manual*, Section 5-007A and 5-308A) or
State authorized project (*Construction Manual*, Section 5-308 B)

Yes ___ No ___

Yes ___ No ___

CL-3 Resident Engineer Contract Provisions Checklist

Federal contract provisions required in the construction contract

(Only for Federal-Aid Projects) (Reference: *Local Assistance Procedure Manual* – Exhibit 12-E PS&E Checklist Instructions)

Local Agency _____ Federal-Aid Project No. _____ N or E
Completed by _____ Title _____
Date _____ Contract Amount \$ _____ Date Contract Awarded _____
Type of Work _____ Location _____

NOTE: Send this checklist to the resident engineer before the conference. The resident engineer will complete and give to the oversight engineer at the preconstruction conference.

Resident Engineer - Check the appropriate box to indicate that the required federal contract provisions are included in the construction contract. Fill in the blanks, and provide the page number where the provision is located.

Required Federal Contract Provisions

(Reference: *Local Assistance Procedure Manual* – Exhibit 12-E PS&E checklist instructions)

- | | Page No. |
|---|----------|
| 1. General Federal Requirements | |
| <input type="checkbox"/> Caltrans SSP - Section 14. Federal Requirements for Federal-aid Construction Projects (FR-1 & FR-2 is included) | _____ |
| 2. FHWA Form 1273 | |
| Incorporation of FHWA Form 1273 into contract | |
| <input type="checkbox"/> A copy of FHWA Form 1273, Required Contract Provisions Federal-aid Construction Contracts (Attachment B, FR-3 through FR-14) has been physically incorporated into this contract | _____ |
| 3. Certification/Disclosure Forms | |
| <input type="checkbox"/> Equal Employment Opportunity Certification | _____ |
| <input type="checkbox"/> Noncollusion affidavit | _____ |
| <input type="checkbox"/> Debarment and Suspension Certification | _____ |
| <input type="checkbox"/> Nonlobbying Certification for federal-aid contracts | _____ |
| <input type="checkbox"/> Disclosure of lobbying activities | _____ |
| <input type="checkbox"/> Federal lobbying restrictions | _____ |
| 4. Liquidated Damages | |
| <input type="checkbox"/> Caltrans SSP Section 4. Beginning of Work, Time of Completion and Liquidated Damages is included in this contract. | _____ |
| <input type="checkbox"/> Equivalent provisions are included. | _____ |

5. Disadvantaged Business Enterprise Subcontracting

Contract goal _____ Race conscious portion _____ Race neutral portion _____

NOTE: Race conscious and race neutral portion is obtained from local agency's Disadvantaged Business Enterprise (DBE) liaison officer.

Local agency's DBE liaison officer _____

- ☐ This contract has a specific DBE goal to meet the intent of the DBE program
- ☐ This contract has no specific DBE goal as it has been determined that one is not appropriate.
(Documentation verifies this determination and is on file.)
- If contract has a specific race conscious goal, complete Section A below.
- If contract does not have a specific race conscious goal, complete Section B below.

6. Contracts with specific goals (Check if included and indicate page number.)

The following applicable Caltrans standard special provisions (SSPs) to Caltrans *Standard Specifications* or their equivalent are included in the contract special provisions with page numbers noted (editing may be required).

Page No.

- ☐ 2-1.01 "General" Required listing of proposed subcontractors and required contract assurance statement or equivalent provisions _____
- ☐ "Listing of Subcontractors" or equivalent form _____
- ☐ 2-1.02 "Disadvantaged Business Enterprise (DBE)" or equivalent provisions _____
- ☐ 2-1.02A "DBE Goal for This Contract" or equivalent provisions _____
- ☐ 2-1.02B "Submission of DBE Information" or equivalent provisions _____
- ☐ 3- "Award and Execution of Contract" or equivalent provisions _____
- ☐ Caltrans SSP 5-1. __ "Subcontractor and DBE Records" or equivalent provisions _____
- ☐ Caltrans SSP 5-1. __ "DBE Certification Status Change" or equivalent provisions _____
- ☐ Caltrans SSP 5-1. __ "Performance of DBE Subcontractors and Suppliers" or equivalent provisions _____
- ☐ Caltrans SSP 5-1. __ "Subcontracting" or equivalent provisions _____
- ☐ Caltrans SSP 5-1. __ "Prompt Progress Payments to Subcontractors" or equivalent provisions _____
- ☐ Caltrans SSP 5-1. __ "Prompt Payment of Withheld Funds to Subcontractors" or equivalent provisions _____
- ☐ Caltrans "SSP DBE Information" Form or equivalent provisions _____

7. Contracts without specific goals (Check if included and indicate page number)

The following applicable Caltrans standard special provisions (SSPs) to Caltrans *Standard Specifications* or their equivalent are included in the contract special provisions with page numbers noted (editing may be required).

- | | Page No. |
|--|----------|
| <input type="checkbox"/> 2-1.01 "General" Required listing of proposed subcontractors and required contract assurance statement or equivalent provisions | _____ |
| <input type="checkbox"/> "Listing of Subcontractors" or equivalent form | _____ |
| <input type="checkbox"/> 2-1.02 "Disadvantaged Business Enterprise (DBE)" or equivalent provisions | _____ |
| <input type="checkbox"/> 3- "Award and Execution of Contract" or equivalent provisions | _____ |
| <input type="checkbox"/> Caltrans SSP 5-1. __ "Subcontract and DBE Records" or equivalent provisions | _____ |
| <input type="checkbox"/> Caltrans SSP 5-1. __ "DBE Certification Status Change" or equivalent provisions | _____ |
| <input type="checkbox"/> Caltrans SSP 5-1. __ "Subcontracting" or equivalent provisions * | _____ |
| <input type="checkbox"/> Caltrans SSP 5-1. __ "Prompt Progress Payments to Subcontractors" or equivalent provisions * | _____ |
| <input type="checkbox"/> Caltrans SSP 5-1. __ "Prompt Payment of Withheld Funds to Subcontractors" or equivalent provisions * | _____ |
| * 6/21/04 update | |

8. Buy America Specification

Page No

- | | |
|---|-------|
| <input type="checkbox"/> Caltrans SSP 5-1. __ "Buy America Specification" | _____ |
|---|-------|

9. Federal Trainees (Check appropriate box and indicate page number if requirement applies)

- ☐ The project has less than 100 working days. A Federal Trainee goal and special provisions are not required.
- ☐ Analysis of the Engineers Estimate has the dollar value under \$200,000. (*Local Assistance Procedure Manual*, Section 12-9, "Required Federal Contract Provisions")
A Federal Trainee goal and special provisions are not required.
- ☐ Caltrans SSP – "Federal Requirement Training Special Provisions"
(FR-15 and FR-16) are included. The Trainee goal is _____

10. Federal Wage Rates

- | | |
|--|-------|
| <input type="checkbox"/> Federal Wages Rates are physically incorporated in this contract. | _____ |
|--|-------|

***NOTE to resident engineer:** If any of the above-required federal contract provisions are not included in your contract, a contract change shall be executed to include the provisions. Failure to include the provisions can result in the loss of federal funds for the contract.*

CL-4 Oversight Engineer's Construction Contract Administration Verification Checklist

Date _____

Dist/Co/Route/PM _____ Location _____
Local Agency _____ Contractor _____
Percentage of Work Complete _____

Federal-Aid Project: Yes ___ No ___ Federal-Aid Project Number _____ N or E

NOTE: Only complete the sections that have been reviewed. For federal-aid projects, also use the federal-aid project section.

Project Files (*Construction Manual*, Section 5-102)

Are they filed according to the Caltrans uniform filing system?

Yes ___ No ___

(Check quarterly for continued Quality Assurance)

Comments:

Monthly Progress Pay (If state funds included in contract)

Approved by the oversight engineer?

Yes ___ No ___

Comments:

Resident Engineer's, Assistant's and Structure Representative's Daily Diaries (*Construction Manual*, Sections 5-004 & 005)

Are they current, thorough, and neat?

Yes ___ No ___

(Local agency can use their own forms, however, their form shall contain the same information as required in Sections 5-004 & 005. Repeat checking until you are assured the diaries are being kept current, thorough and neat.)

Comments:

Contract Change Orders (*Construction Manual*, Section 5-308)

Is there a list of the approved and pending contract change orders?

Yes ___ No ___

(Check three months after start of construction, then check quarterly for QA.)

Comments:

Materials Files (*Construction Manual*, Section 3-6)

Is there a copy of the consultant material tester's Caltrans certifications in the project files?

Yes ___ No ___

Comments:

Spot-check the following materials items list below on a quarterly basis for Quality Assurance.

Is the local agency filing Notice of Materials to be used? Yes ___ No ___
Comments:

Is the local agency filing the Certifications of Compliance? Yes ___ No ___
Comments:

Do the Certifications of Compliance contain the required information? Yes ___ No ___
Comments:

Is the local agency filing Report of Inspection of Materials, and are material release tags or stickers attached? Yes ___ No ___
Comments:

Are trial batch test results being properly identified and accepted? Yes ___ No ___
Comments:

Are there Acceptance Sampling and Testing Reports in the files? Yes ___ No ___
Comments:

Is there a "Summary Log" of Acceptance tests? Yes ___ No ___
Comments:

What is the frequency of tests? _____

What frequency tables are used? _____
Comments:

Is the frequency of tests being monitored? Yes ___ No ___
Comments:

Are failed tests documented in the files with cross-references to passing retests? Yes ___ No ___
Comments:

Does the resident engineer see the test reports? Yes ___ No ___
Comments:

As-built (*Construction Manual*, Section 5-104) (*Local Assistance Procedure Manual*, Section 17-4)

Are “As built” changes being drawn on a set of plans or entered in a computer file? Yes ___ No ___

Checked quarterly to make sure as-builts are being updated? Yes ___ No ___

Comments:

Water Pollution Control (*Construction Manual*, Section 7-104)

Has the resident engineer reviewed and approved the contractor’s SWPPP or WPCP?

Yes ___ No ___

Has a copy of the approval been sent to the OSE and district construction storm water coordinator?

Yes ___ No ___

(Check one month after start of construction.)

Comments:

Are the resident engineer or field staff preparing daily reports and inspections on water pollution control?

Yes ___ No ___

Are the diaries thorough and complete?

Yes ___ No ___

Has the contractor submitted SWPPP or WPCP inspection reports?

Yes ___ No ___

Have corrective actions and BMPs maintenance been completed?

Yes ___ No ___

(Spot-check quarterly for QA.)

Comments:

Was the Annual Construction Activity Certification submitted annually (by June 15th)?

Yes ___ No ___

NOTE: Form needs to be submitted to the district or region construction storm water coordinator.

Comments:

Tour the construction site. Is the contractor deploying the BMPs called for in the SWPPP or WPCP?

Yes ___ No ___

(Spot-check quarterly for QA.)

Comments:

Was the NOC and NOT submitted to the OSE for issuance to the RWQCB, district construction storm water coordinator and the district NPDES coordinator.

Yes ___ No ___

Environmental Permits (if encountered or part of the contract) (*Construction Manual*, Section 7-105)

Is resident engineer adhering to the Fish and Game Lake/Streambed Alteration Agreement, Section 404 requirements for wetlands, Section 401 Water Quality Certification, and Coastal Zone Management Act?

Yes ___ No ___

Comments:

Environmental (*Construction Manual*, Chapter 7) (*Local Assistance Procedure Manual*, Section 6-15)

Is the environmental document for this project in the resident engineer's files? Yes ___ No ___

(Check at the preconstruction conference)

Comments:

Is the construction project adhering to the mitigation requirements in the environmental document?

Yes ___ No ___

Is there documentation to show the contractor and resident engineer are adhering to the requirements?

Yes ___ No ___

(Check quarterly for QA)

Comments:

Environmental Hazards and Safety Procedures (if encountered or part of the contract)

(*Construction Manual*, Section 7-106)

Is resident engineer adhering to the hazardous material and waste requirements? Yes ___ No ___

Comments:

Electrical Systems (if modifying or adding a new Caltrans electrical system) (*Construction Manual*, Section 4-86)

Oversight engineer request inspection by Caltrans electrical specialist? Yes ___ No ___

Comments:

Oversight engineer reported changes to district electrical maintenance?

Yes ___ No ___

Comments:

Safety (*Construction Manual*, Section 2-1)

Resident engineer and project safety coordinator monitoring and documenting contractor's compliance with safety requirements? Yes ___ No ___

Comments:

Traffic Control (*Construction Manual*, Section 2-2)

Resident engineer ensuring conformance to district approved traffic control plans? Yes ___ No ___

If changes have been made, was district prior approval obtained? Yes ___ No ___

Comments:

Oversight engineer performed Day Safety verification?

Yes ___ No ___

Comments:

Oversight engineer performed night safety verification?
Comments:

Yes ___ No ___

Are construction signs visible and function properly?
Comments:

Yes ___ No ___

Are stripes and delineation well maintained?
Comments:

Yes ___ No ___

Are temporary devices properly positioned?
Comments:

Yes ___ No ___

K-rails properly placed and clean?
Comments:

Yes ___ No ___

Does the contractor provides safe access to and from work area?
Comments:

Yes ___ No ___

Are detours built to accommodate people with disabilities, pedestrians and bicyclist
where they can be excepted to be present?
Comments:

Yes ___ No ___

CL-5 Federal-aid Projects

*NOTE: Federal-Aid Projects use only**

Contract Time (*Construction Manual*, Section 3-805) (*Local Assistance Procedure Manual*, Section 16-5)

Is there an established method to account for contract time? Yes ____ No ____

(Local agency can use their own form and method. Check one month after the start of construction.)

Comments:

Labor Compliance (*Construction Manual*, Section 8-103) (*Local Assistance Procedure Manual*, Section 16-11)

Are diaries being spot-checked against certified payrolls? Yes ____ No ____

(Check three months after start of construction and quarterly for QA.)

Comments:

What is the established method?

Measurement and Payment (*Construction Manual*, Section 3-903)

Are there source documents supporting progress payments made to contractor? Yes ____ No ____

(Spot-check after second progress payment to the contractor.)

Comments:

Are there separate item sheets for each contract item paid? Yes ____ No ____

(Spot-check after second progress payment to the contractor, then quarterly for QA.)

Comments:

EEO/Wage Rate Posters (*Construction Manual*, Section 8-102A) (*Local Assistance Procedure Manual*, Section 16.112)

Are the federal posters posted for every worker to see, at or near the contractor's office at the construction site, or at the contractor worker's central gathering point? Yes ____ No ____

(Check one month after start of construction.)

Comments:

Employee Interviews (*Construction Manual*, Section 8-102A (3))

Is the local agency conducting employee interviews? Yes ____ No ____

(Check three months after start of construction. Repeat reviews quarterly to assure local agency is conducting interview per the frequency recommended in the *Construction Manual*)

Comments:

Have the interviews been signed and dated? Yes ____ No ____
Comments:

Any violation noted on the interview forms? Yes ____ No ____
Comments:

Have the violations been addressed? (Check quarterly for QA) Yes ____ No ____
Comments:

Federal Training Requirements (*Construction Manual*, Sections 8-208, 8-105E, 8-103A) (*Local Assistance Procedure Manual*, Exhibit 12E & Section 16.11)

Are training requirements included in the contract? Yes ____ No ____
If No, disregard next question.

Contract apprenticeship (trainee) goal? _____
Is there documentation to show that the contractor is meeting the apprenticeship (trainee) goal? Yes ____ No ____
(Check three months after the start of construction, then check quarterly for QA.)
Comments:

DBE (*Construction Manual*, Section 8-3) (*Local Assistance Procedure Manual*, Section 9-4)

How is the resident engineer checking for DBE goal compliance and, that the DBEs listed are performing a commercial useful function? Yes ____ No ____
Check three months after start of construction, then check quarterly for QA.

Payrolls? Yes ____ No ____
Comments:

Interviews? Yes ____ No ____
Comments:

Diaries? Yes ____ No ____
Comments:

Material Invoices? Yes ____ No ____
Comments:

FHWA Communication (*Construction Manual*, Sections 5-007, 5-308)

Do the contract change orders note federal-aid eligibility or in-eligibility?
(Check three months after start of construction, then check quarterly for QA.)
Comments:

Yes ___ No ___

Did the resident engineer receive written and signed prior approval for all major contract change orders?

Yes ___ No ___

(Check three months after start of construction, then check quarterly for QA)
Comments:

Is the FHWA engineer being contacted as the events listed in *Construction Manual*, Section 5-007 occur?

Yes ___ No ___

(Check quarterly for compliance)
Comments:

Buy America (*Construction Manual*, Section 3-605)

Are “Buy America” certification requirements included on all invoices and Certifications of Compliance for iron and steel products?
(Spot-check three months after start of construction, then spot-check quarterly for QA)
Comments:

Yes ___ No ___

Review the construction area and the contractor’s on-site yard, quarterly, and check to make sure foreign iron and steel products are not being incorporated into the project without resident engineer’s approval or a FHWA waiver. Foreign iron or steel products found?
Comments:

Yes ___ No ___

Environmental (*Construction Manual*, Chapter 7) (*Local Assistance Procedure Manual*, Section 6-2)

Is the environmental document for this project in the resident engineer’s files?
(Check at the preconstruction conference)
Comments:

Yes ___ No ___

Is the construction project adhering to the mitigation requirements in the environmental document?

Yes ___ No ___

Is there documentation to show the contractor and resident engineer are adhering to the requirements?

Yes ___ No ___

(Check quarterly for QA)
Comments:

CL-6 FHWA Final Acceptance Checklist For Federal-Aid Full Oversight Projects

Project Information

EA Number _____ Federal-Aid Number _____
 Project Description _____
 District/County/Route/PM _____
 Date Awarded _____ Approval Date _____
 Time Started _____ Work Started _____
 Contract Days _____ Final No. Working Days _____
 Original Completion Date _____ State Acceptance Date _____
 Liquidated Damages (Number of days and total dollar amount) _____

Submittals

Submitted?

Date

Material Certification (<i>Construction Manual</i> , Example 6-1.1)	Yes/No – N/A	_____
Form FHWA-47M	Yes/No – N/A	_____
Proposed Final Estimate	Yes/No – N/A	_____
Last Statement of Working Days	Yes/No – N/A	_____
Contractor's Written Statement of Claims (Submitted separately)	Yes/No – N/A	_____
List of contract change orders	Yes/No – N/A	_____
Approved and Pending	Yes/No – N/A	_____
Participating/Non-Participating	Yes/No – N/A	_____
List of Time Extensions	Yes/No – N/A	_____
FHWA Approved/Not Approved	Yes/No – N/A	_____
Form CEM-2402 (F) Final Report	Yes/No – N/A	_____
Utilization of DBE		
Mitigation Monitoring Reporting Record	Yes/No – N/A	_____
If available, status of environmental commitments if not completed.		

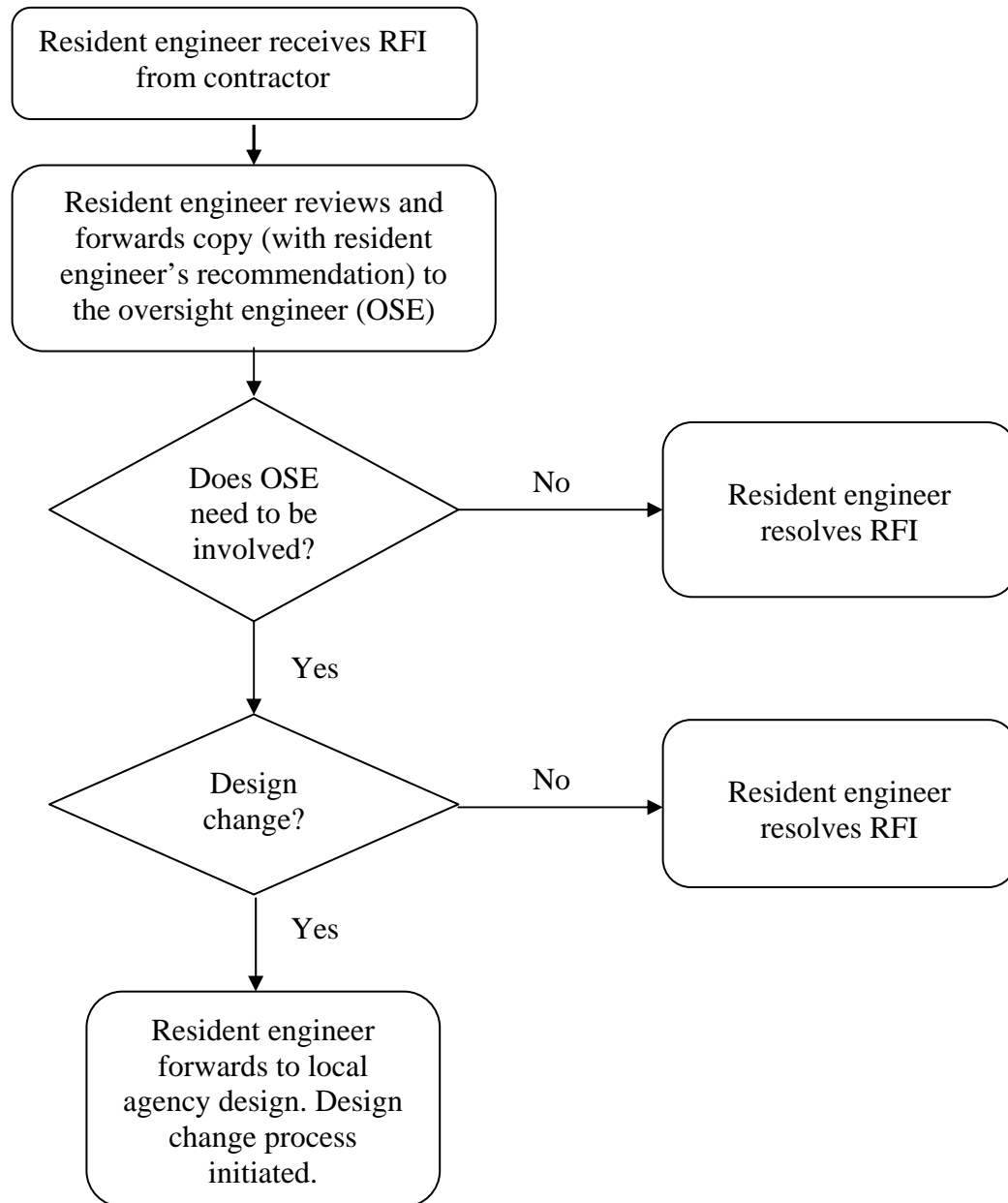
Additional Information

Labor Compliance Problems _____

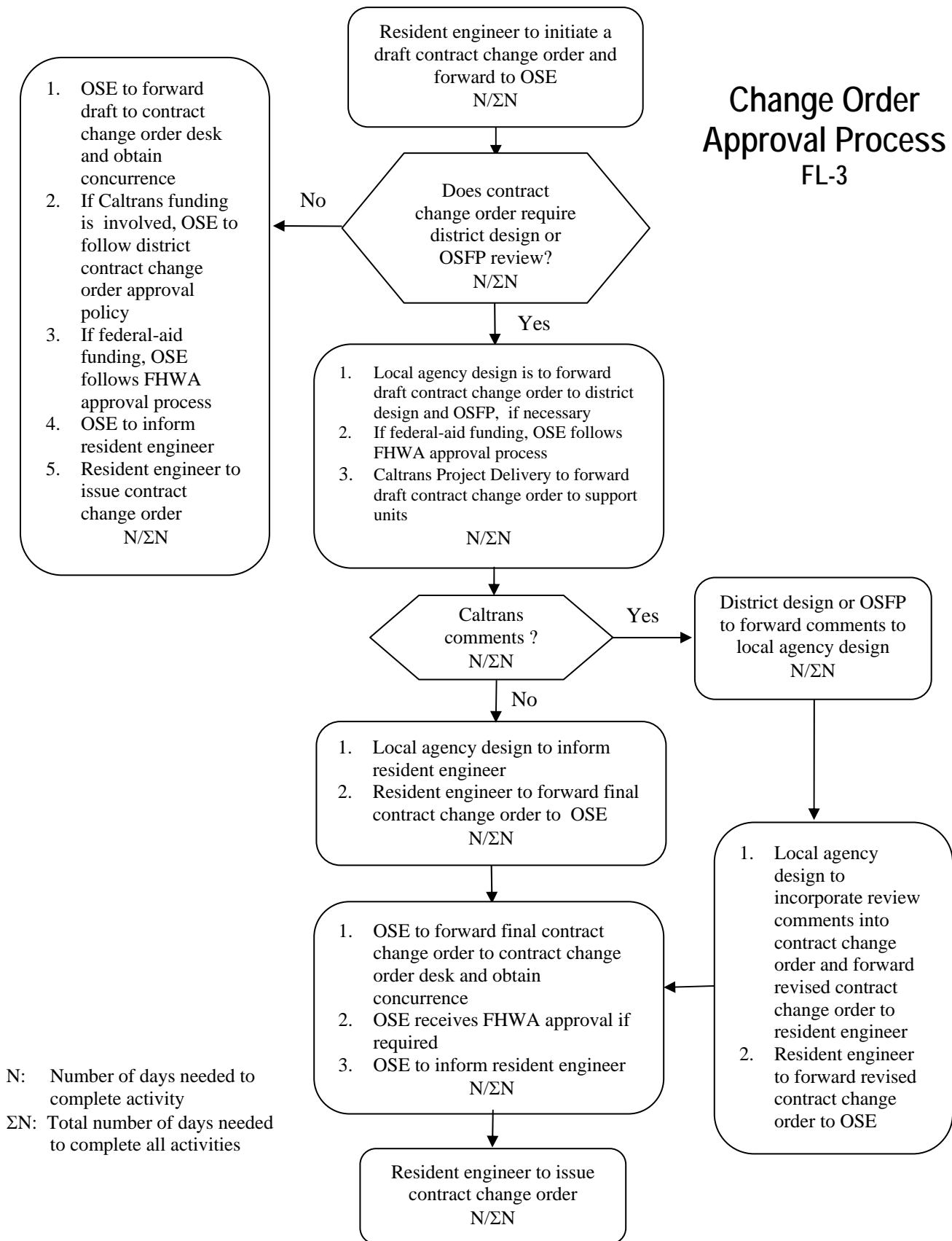
 Any other changes _____

(Original – Project File cc – FHWA – with Proposed Final Estimate)

Flow Chart for Approving Requests for Information (RFI) FL-2

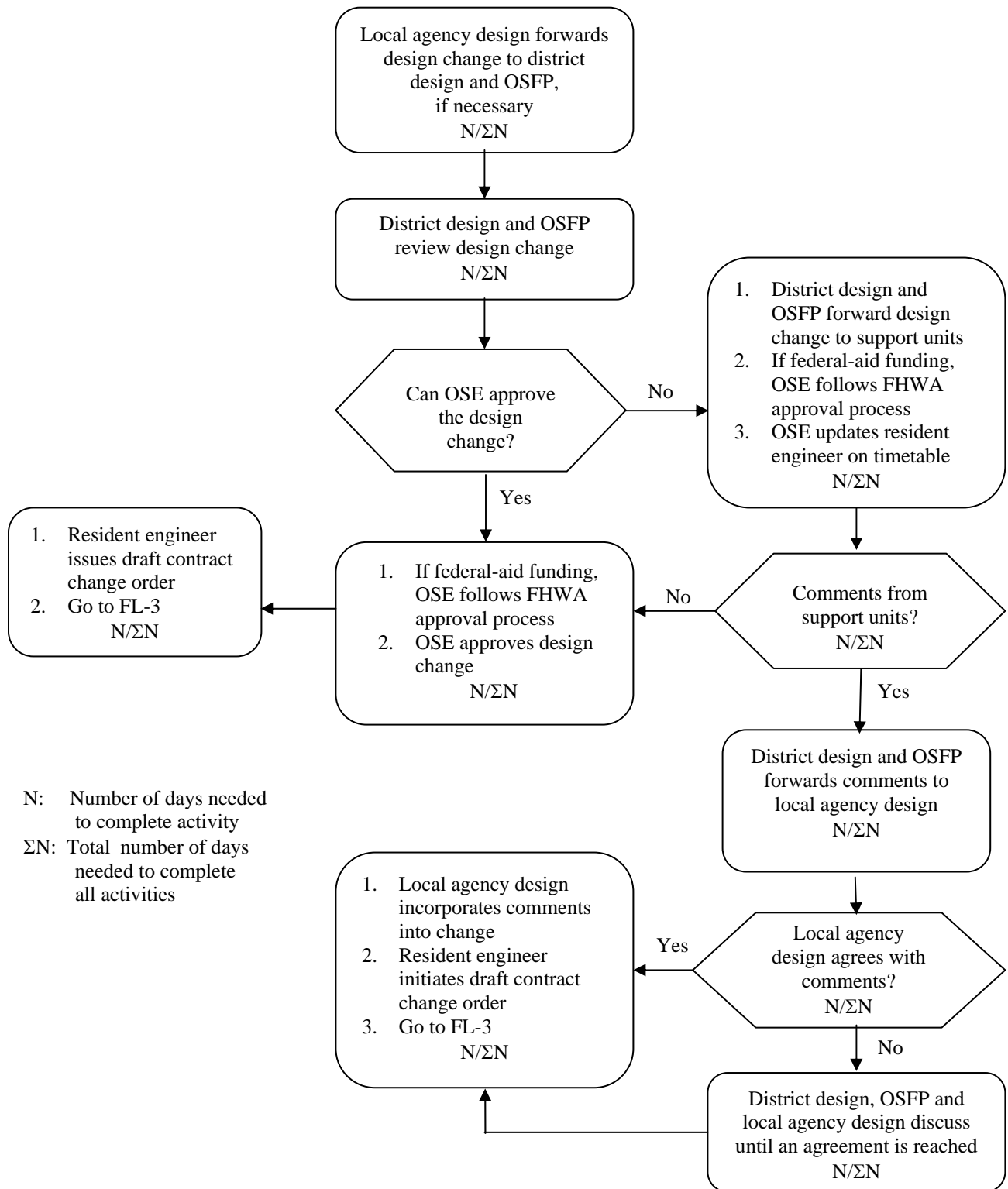


Change Order Approval Process FL-3

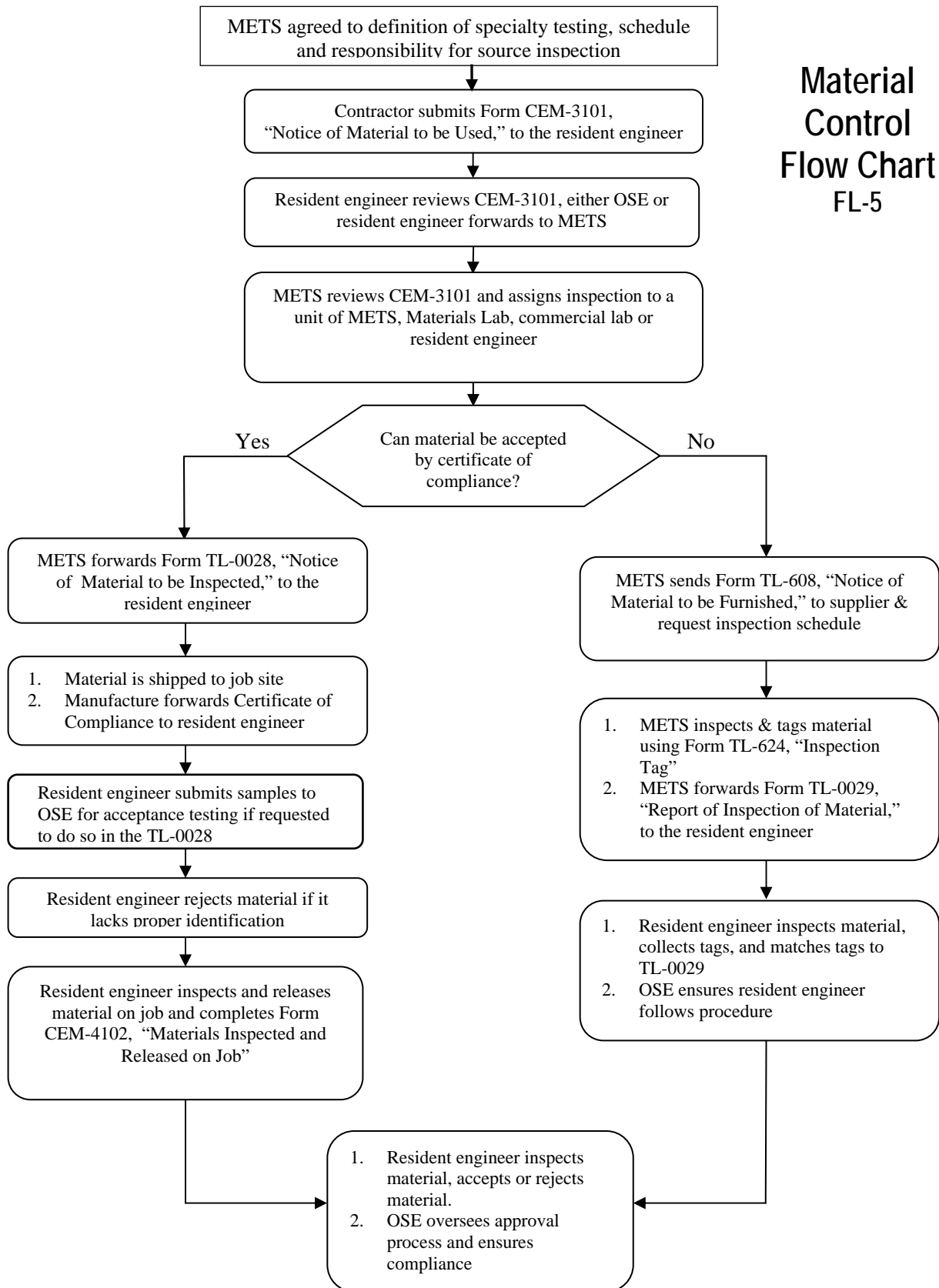


Local Agency Initiated Design Change Process

FL-4

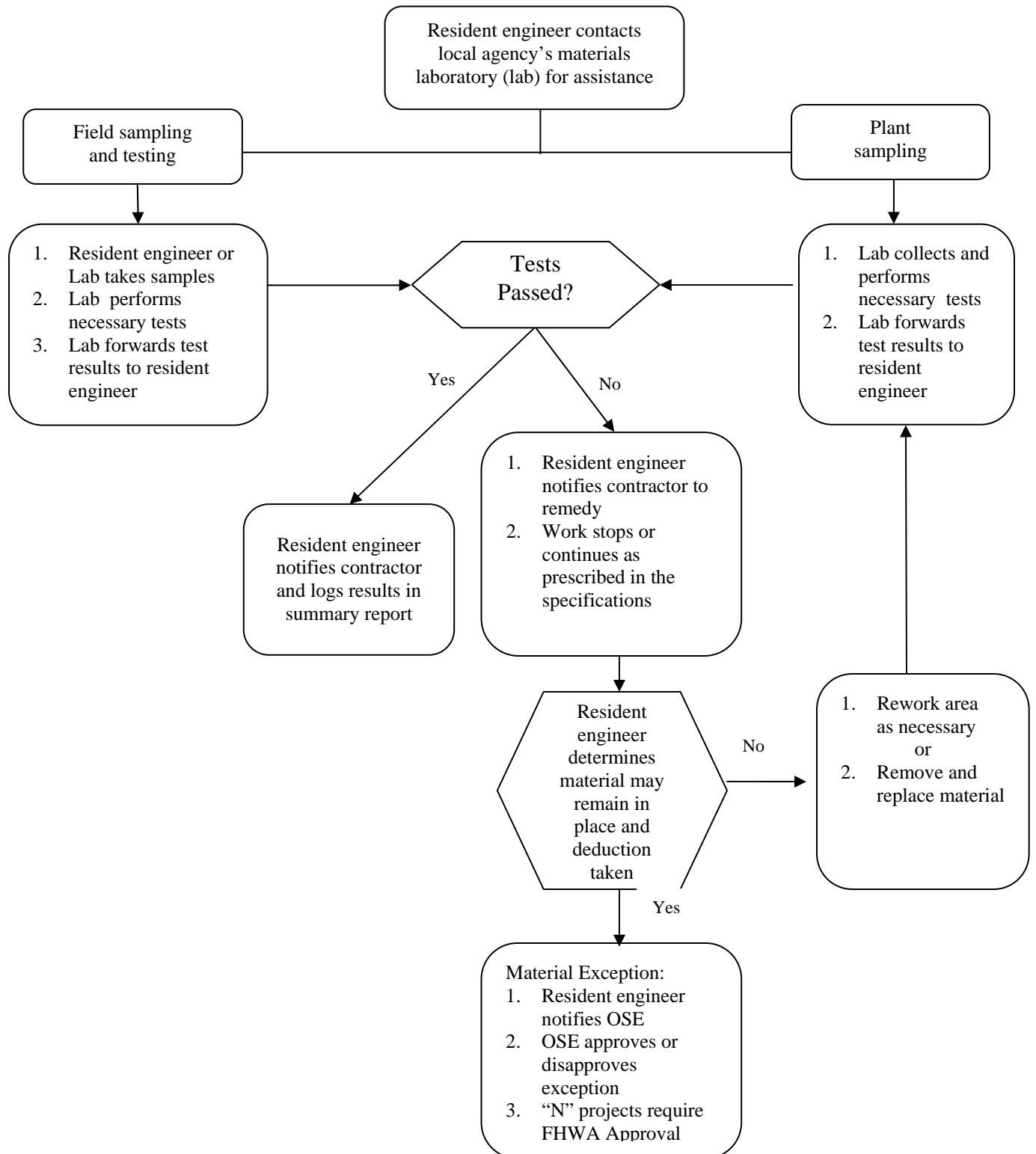


Material Control Flow Chart FL-5



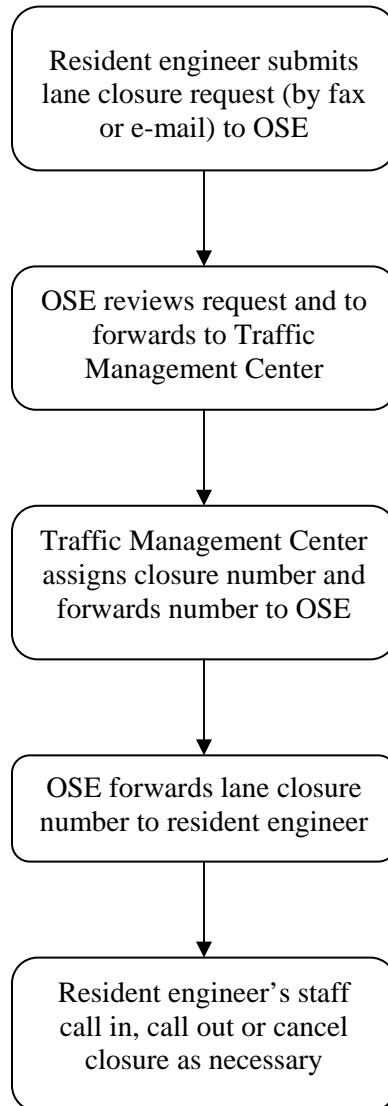
Material Testing Process

FL - 6



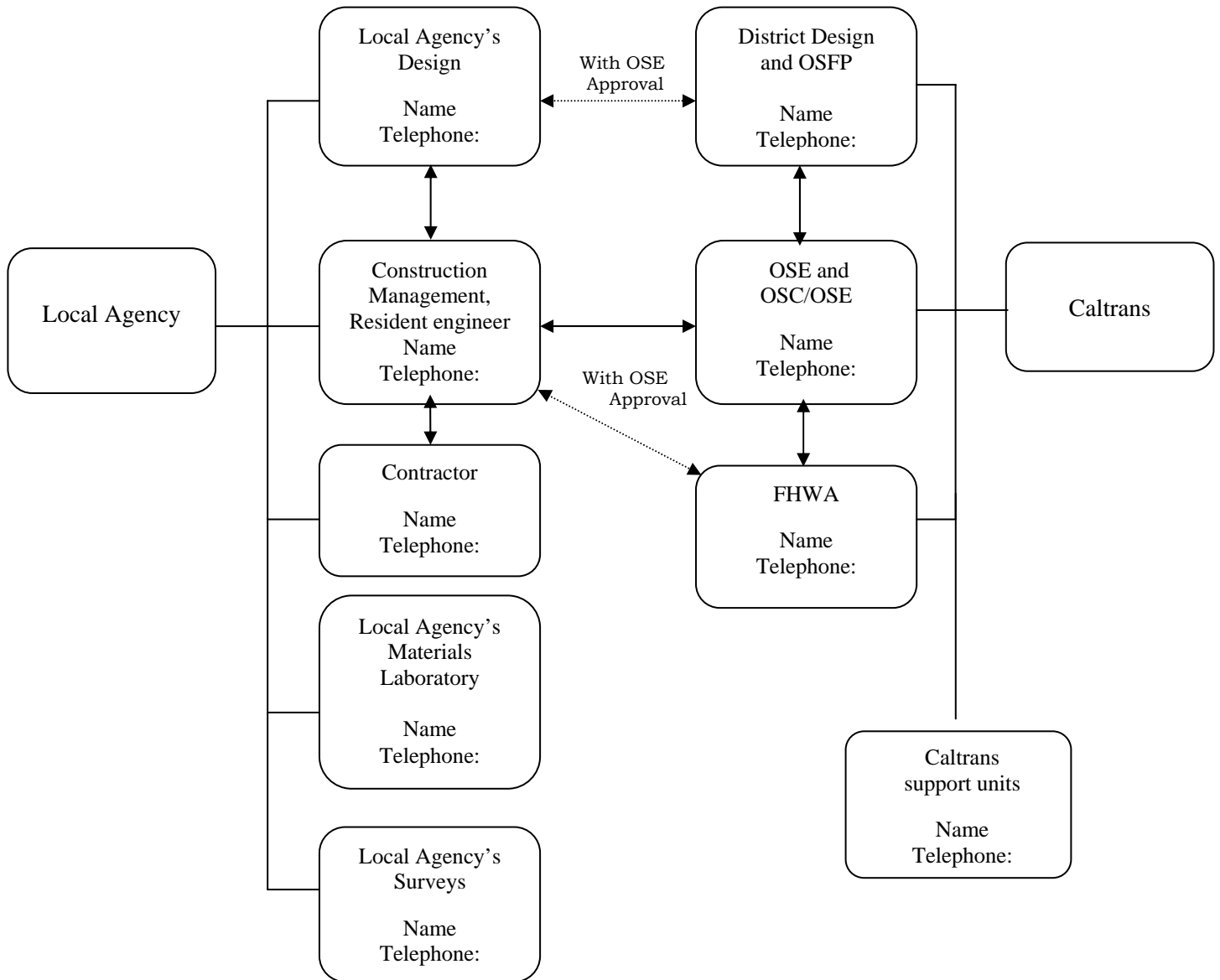
Lane Closure Approval Process

FL-7

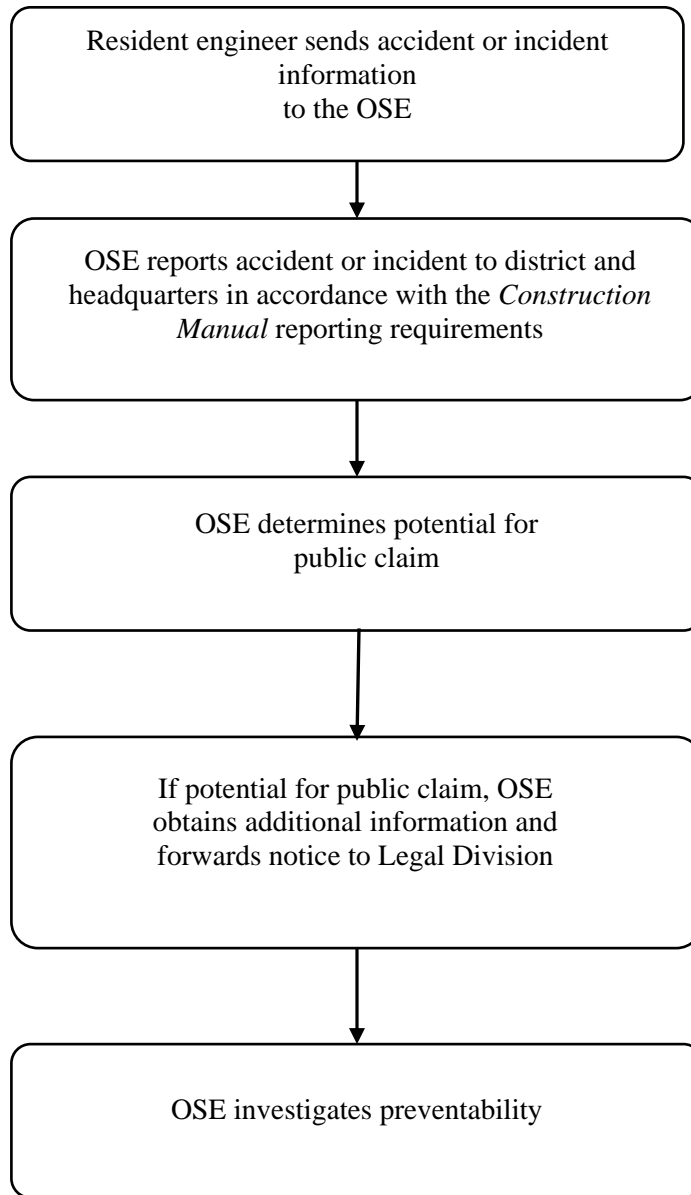


Communication Channels Flow Chart

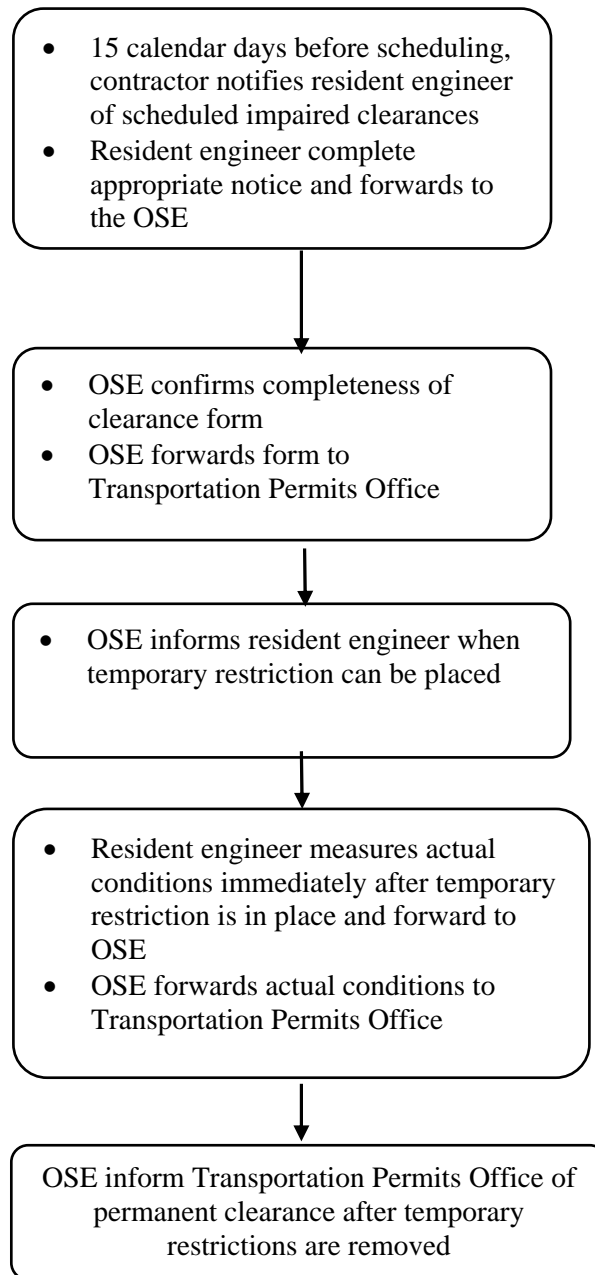
FL-8



Accident or Incident Reporting Process FL-9



Procedures for Clearance Notification FL-10



Notice of Change in Clearance or Bridge Weight Rating	TR-0019
Notice of Change in Vertical or Horizontal Clearance	TR-0020
Notice of Change in Clearance or Bridge Weight Rating	TR-0029

FM-1 PRECONSTRUCTION CONFERENCE**DATE:****ATTENDANCE ROSTER****AGENCY:** __________
Job Stamp

	<u>NAME</u>	<u>Affiliation/Title</u>	<u>Telephone/Fax/E-mail</u>
1			
2			
3			
4			
5			
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18			

DOCUMENTS BOND OF STATE HIGHWAY OVERSIGHT PROJECTS

CEM-1101(NEW 02/2004)

(To Accompany the Permit)
Streets and Highways Code Section 678

PRINCIPAL		BOND NUMBER		BOND'S EFFECTIVE DATE	PERMIT NUMBER
LOCATION	DISTRICT	COUNTY	ROUTE	KP/PM	
PROJECT'S NAME			PROJECT'S E.A. NUMBER		
DISTRICT PROJECT MANAGER		PROJECT MANAGER'S MAILING ADDRESS			BUSINESS PHONE NUMBER

(PLEASE FILL OUT THE FORM)

Know All Persons By These Presents:

That _____, as **PRINCIPAL**, and _____a surety company qualified and duly licensed to do business in the State of California, as **SURETY**, are held and firmly bound to the**STATE OF CALIFORNIA**, as **OBLIGEE**, in the sum of: **TWENTY THOUSAND dollars (\$20,000.00)** lawful money of the UnitedStates of America, to be paid to the **OBLIGEE**, for which payment, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, to those persons referred to in item #4.**THAT THE CONDITION OF THIS OBLIGATION IS SUCH,**

1. That whereas **PRINCIPAL** has made, or is about to make a submittal to the State of California for an oversight project, to be constructed under an encroachment permit, in accordance with Article 2, Chapter 3, Division 1 of the Streets and Highways Code to place, change or renew an encroachment in, under or over any portion of a state highway. A bond payable to the State of California is a required condition of the Streets and Highways Code Section 678. Therefore, this bond is executed and tendered in accordance with the Streets and Highways Code.
2. This bond shall be subject to all the previously mentioned terms and provisions of the Streets and Highways Code.
3. That if the **PRINCIPAL** shall fail to faithfully provide all final documentation as required in item #9, then the **SURETY** herein shall pay for the production of these documents by others.
4. No right of action shall accrue under this bond to or for the use of any person or entity other than the State of California.
5. That this bond shall be deemed continuous in form, remain in full force and effect, until notice is given to the **SURETY** by the Department of Transportation. The notice shall include that the **PRINCIPAL** has fulfilled their obligations and provided the Department of Transportation with all the required documents listed in item #9.
6. The **SURETY** shall give at least thirty (30) days written notice of the termination, cancellation or material change of the policy. Such notices shall be sent to the Department of Transportation's district project manager as listed in the heading. The notice shall include the permit number and the projects EA number, location, county, route, and kilometer post (KP) or post mile (PM).
7. That the **SURETY** shall bear no liability on this bond in the event the encroachment permit issued to the **PRINCIPAL** is cancelled or withdrawn prior to commencement of work on state property by the **PRINCIPAL**.
8. This bond is executed to comply with the provisions of Chapter 3, Division 1 of the Streets and Highways Code and of Chapter 2, Title 14, Part 2 of the Code of Civil Procedure, and said bond shall be subject to all of the terms and provisions thereof.

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

DOCUMENTS BOND OF STATE HIGHWAY OVERSIGHT PROJECTS

Page 2 of 2

CEM-1101 (NEW 02/2004)

9. That the following checklist of documents is prepared in accordance with all appropriate Department of Transportation manuals, plans and specifications, encroachment permits, and project cooperative agreements. The completed documents are required upon completion of the project and are subject to the approval of the Department of Transportation's State Representative.

AS-BUILT PLANS PER COOPERATIVE AGREEMENT AND ENCROACHMENT PERMITS <input style="float: right;" type="checkbox"/>	
PROJECTS WITH STRUCTURES <input type="checkbox"/>	
<div style="display: flex; justify-content: space-between;"><div><div>Red Marked As-Built for Structures <input type="checkbox"/></div><div>Final As-Built for Structures <input type="checkbox"/></div><div>Shop Drawings On Microfilm <input type="checkbox"/></div><div>Joint Movement Calculations for Structures DSD-D0129 <input type="checkbox"/></div><div>Structure Construction Records _____</div><div>Other Structure Construction Records _____</div></div><div><div>Structures AS-Built Route Slip <input type="checkbox"/></div><div>Report Of Completion For Structures DS-OS C3 <input type="checkbox"/></div></div><div><div>Driven Pile Records for Structures DC-C78 <input type="checkbox"/></div><div>DH-OS C79 <input type="checkbox"/></div><div>DH-OS C80 <input type="checkbox"/></div><div>Paint Records for Structures DH-OS M5 <input type="checkbox"/></div><div>DH-OS M8 <input type="checkbox"/></div><div>DH-OS M11 <input type="checkbox"/></div><div>DH-OS M78 <input type="checkbox"/></div></div></div>	
SURVEY AND RIGHT-OF-WAY DOCUMENTS <input type="checkbox"/> _____ Title Insurance Policy <input type="checkbox"/>	
WARRANTIES <input type="checkbox"/>	MAINTENANCE AGREEMENTS <input type="checkbox"/>
FEDERAL-AID PROJECTS <input type="checkbox"/>	
<div style="display: flex; justify-content: space-between;"><div><div>Final Inspection of Federal Aid Project FHWA 1448C <input type="checkbox"/></div><div>Local Agency Final Inspection For 17-C LAPM <input type="checkbox"/></div><div>Material Certification FHWA-47M <input type="checkbox"/></div><div>Contractor's Written Statement of Claims <input type="checkbox"/></div><div>Final Report CEM-2402F (Utilization of DBE) <input type="checkbox"/></div><div>List of Contract Change Orders <input type="checkbox"/></div></div><div><div>FHWA 47 <input type="checkbox"/></div><div>Final Report of Expenditures 17-M LAPM <input type="checkbox"/></div><div>Last Statement of Working Days <input type="checkbox"/></div><div>List of Time Extensions <input type="checkbox"/></div><div>Mitigation Monitoring Reporting Records <input type="checkbox"/></div></div></div>	

10. The documents listed above shall be submitted to the Department of Transportation's State Representative within
☐ 30 ☐ 90 ☐ 180 days of completing the project.

PRINCIPAL		DATE
BUSINESS ADDRESS OF PRINCIPAL		BUSINESS PHONE
CITY	STATE	ZIP CODE
PRINT OR TYPE NAME OF AUTHORIZED SIGNATURE AND TITLE		AUTHORIZED SIGNATURE AND TITLE
NAME OF SURETY		DATE
BUSINESS ADDRESS OF SURETY		BUSINESS PHONE
CITY	STATE	ZIP CODE

I certify (or declare) under penalty of perjury that I have executed the foregoing bond under an unrevoked power of attorney, executed on _____, in _____, under the laws of the State of California.

PRINT OR TYPE NAME OF ATTORNEY-IN-FACT FOR SURETY	SIGNATURE OF ATTORNEY-IN-FACT FOR SURETY
--	---

Acronyms

Caltrans	California Department of Transportation
CEC	Certification of Environmental Compliance
CHP	California Highway Patrol
COZEEP	Construction Zone Enhanced Enforcement Program
CPM	Critical Path Method
CRP	Cost Reduction Proposal
CT	Caltrans
DBE	Disadvantage Business Enterprise
DVBE	Disabled Veteran Business Enterprise
E	Exempt
EA	Expenditure Authorization
EPM	Encroachment Permits Manual
FHWA	Federal Highway Administration
ISTEA	Intermodal Surface Transportation Efficiency Act
METS	Materials Testing and Engineering Services
N	Nonexempt
NEPA	National Environmental Policy Act
NOPC	Notice of Potential Claim
NPDES	National Pollutant Discharge Elimination System
OSE	Oversight Engineer
OSC/OSE	Office of Structures Construction – Oversight Engineer
OSFP	Office of Special Funded Projects
PS&E	Plans Specifications and Estimate
QA	Quality Assurance
RFI	Request For Information
RTPA	Regional Transportation Planning Agency
SFM	State Furnished Materials
STIP	State Transportation Improvement Program
SWPPP Storm	Water Pollution Prevention Plan
TEA-21	Transportation Equity Act for the 21 st Century
TOPSS	Transportation Operations and Project Support System
WPC	Water Pollution Control
WPCP	Water Pollution Control Plan